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PACIFIC FISHERMAN

And After Geneva WHAT? . . . p7

R. S. W. Fish Chill Method Pays . p12

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USSR Fleet Off Alaska—

(article on page 8)

Soviet factoryship receiving catches of her satellite trawlers in the broken ice of Bering Sea, as photographed by Steve McCutcheon of Anchorage from the Wakefield trawler "Deep Sea." Note women aboard the Russian "Food Industries."

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PACIFIC FISHERMAN

Our Fifty-Eighth Year— MAY 1960 Vol. 58 No. 6

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At the Fisheries Council of Canada, Vancouver, 1960

Top Row—John A. Buchanan, Richard Nelson, Hon. J. Angus MacLean, Minister of Fisheries; Gordon O'Brien, manager, Fisheries Council of Canada; D. Wilson.
Second Row—Mrs. R. T. Hager; President Roger T. Hager of Fisheries Council of Canada; Mayor Beth Wood of New Westminister.
Third Row—George McKay, A. J. Whitmore, Pacific Area Director, Canadian Department of Fisheries; S. M. Rosenberg.
Fourth Row—Norman F. Hyland, K. F. Fraser, Francis Millerd, H. G. Haggart.

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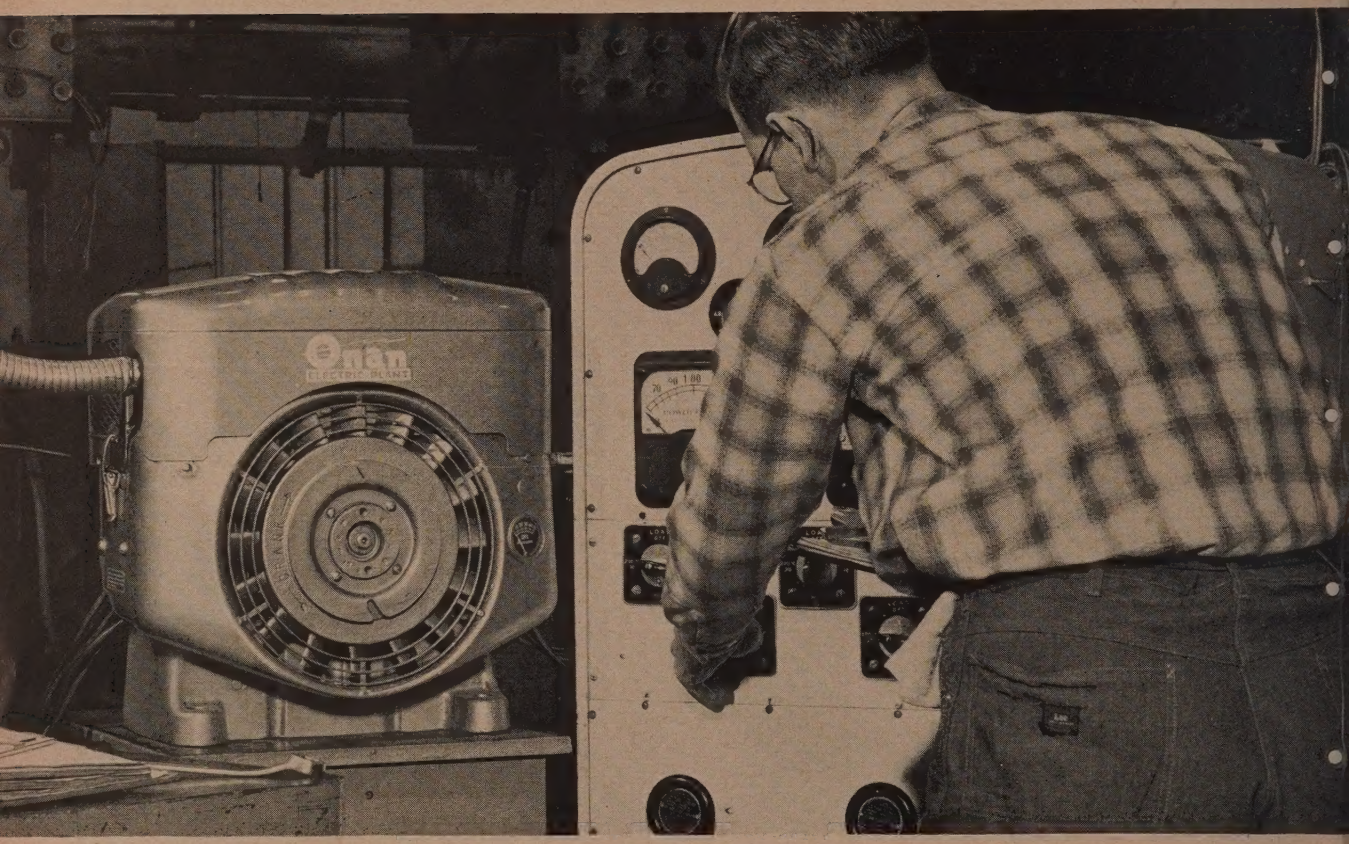

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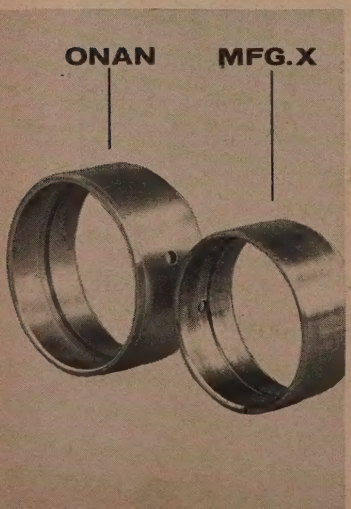

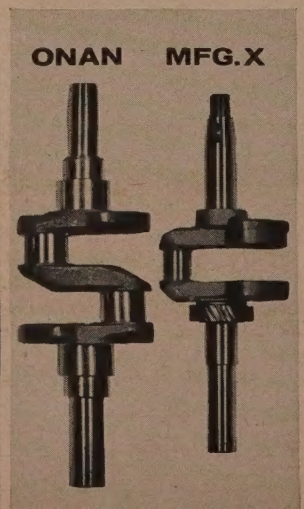

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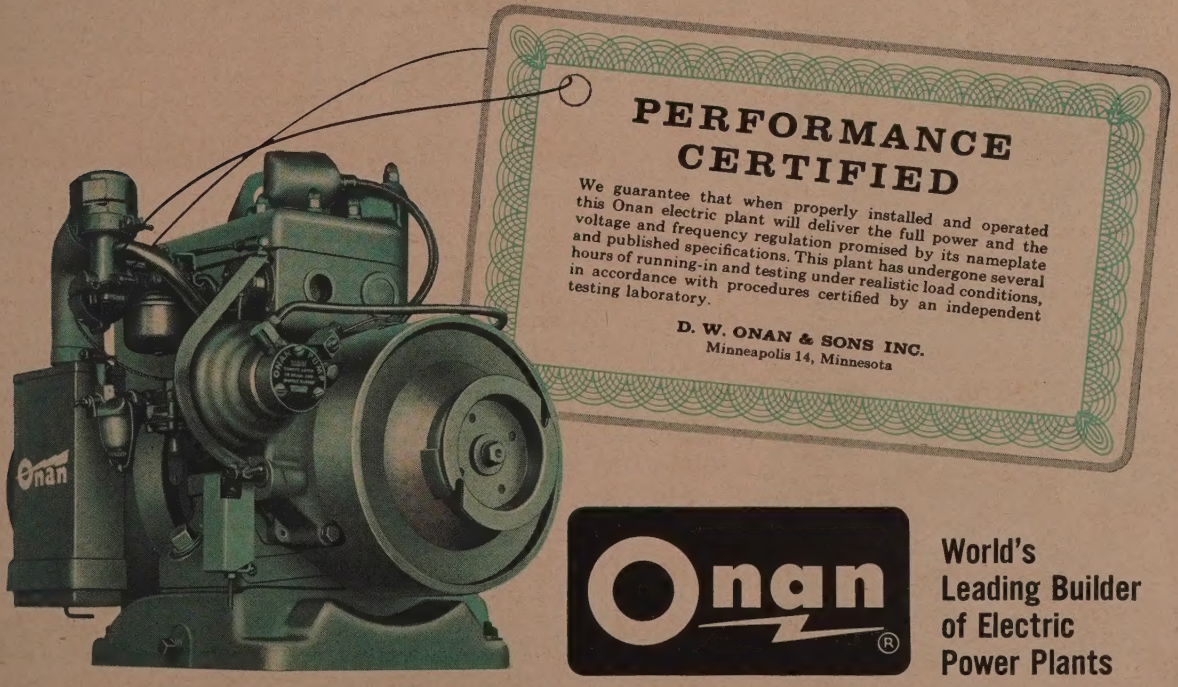
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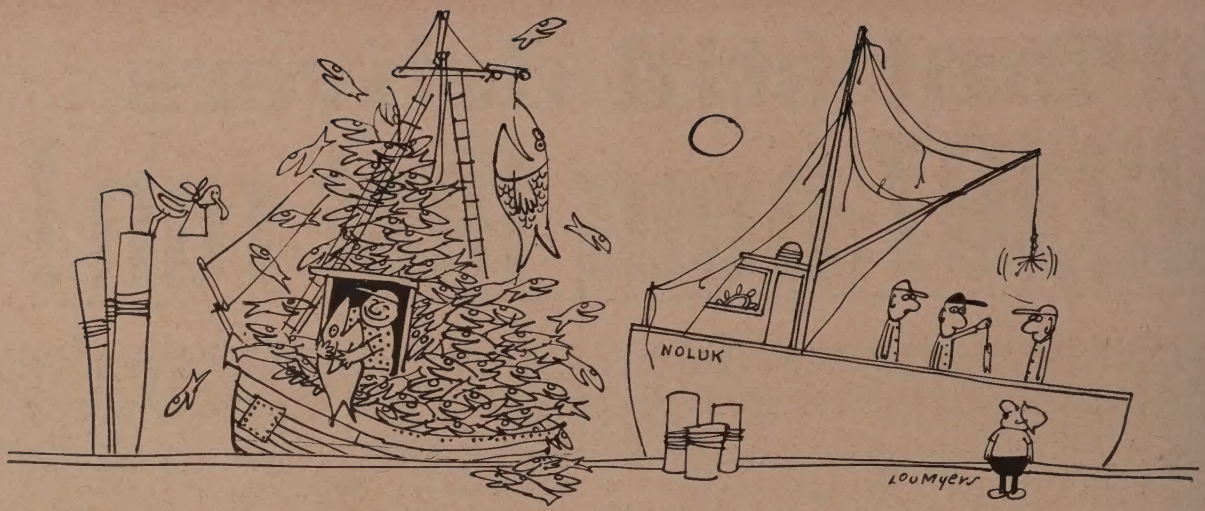

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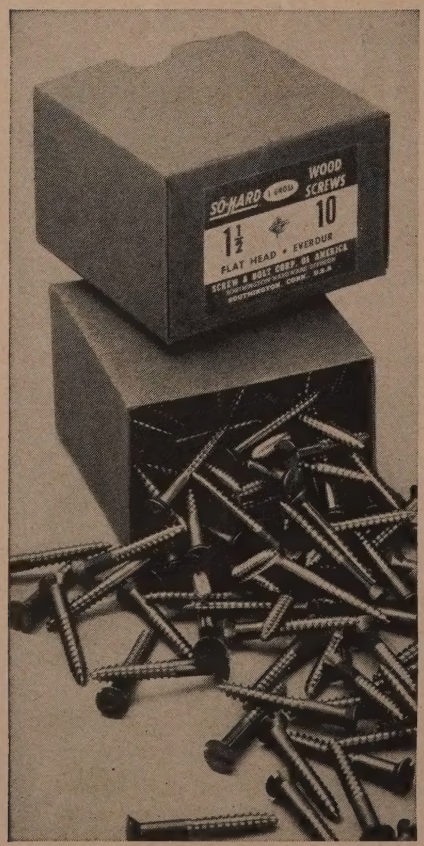

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PACIFIC FISHERMAN

May, 1960

After Geneva— WHAT?

● Failure again marked the United Nations' efforts to revise and rewrite international law as it pertains to (a) the width of the territorial sea; and (b) the fishing rights of nations.

For a second time the delegations of 87 nations have grappled with these questions, and have gone home empty-handed.

In the American fisheries some elements are delighted that nothing was accomplished and no changes made.

Others are gravely concerned lest the inability of two-thirds of the nations to agree upon solutions of these problems will be seized upon by some nations as a signal of release, freeing them to move individually to the declaration of fishing zones and territorial seas meeting their own concepts and caprice.

Yet another body of United States industry and governmental thinking is fearful that failure to agree in 1960 to a reasonable settlement may open the way to defeat another time.

● For some American fisheries, notably salmon trolling, trawling for bottomfish and shrimp, and perhaps longlining for halibut, failure to agree upon an extension of territorial waters and fishing rights to 12 miles from shore is accepted as a victory.

Certainly it is respite, although some extremely well informed national authorities are inclined to believe that the respite in fact may prove shorter than the 10 years of protection for "historic rights" contemplated in the compromise plan offered by the United States and Canada.

● Looking beyond the relief won by American trollers and trawlers, failure to win two-third approval for the United States-Canadian compromise plan was another sharp defeat for American diplomacy, and particularly for the Navy's strategy as manifest in the United States' official position widely disclosed prior to the Geneva meeting.

International analysts were of the opinion that the "last straw" which broke down the United States and Canadian proposal was the adverse reaction among the Arab nations to the picketing of an Arab vessel in New York harbor by longshoremen. This incident was used to blight any swing of African votes toward the U.S.-Canada proposal.

Actually, Arab advocacy of 12-mile territorial seas was extremely strong throughout the conference as a means of denying Israel egress to the Indian Ocean through the Gulf of Aqaba.

● One thing gained at Geneva — beside the respite for some elements of the American fisheries which historically have fished within 12 miles of the coasts of other nations — was an improved concept of North American interest between the United States and Canada.

The two great neighbors showed they could compose differences and unite upon a program, as they have done historically in the North Pacific halibut and Fraser River-Puget Sound Sockeye and Pink salmon fisheries.

Herein appears to lie the best possibility for the adjustment of fishery problems by consultation between the nations concerned; and thus keeping fishery questions from involvement in the complications of international geopolitics.

The point was made plainly in Washington by Senator Warren G. Magnuson of Washington, whose position as chairman of the Senate Committee on Foreign and Domestic Commerce gives him a particularly powerful voice in such matters. The senator is quoted: "The defeat of the proposal proves that territorial limits and fishing rights should not be lumped. We ought to let fishing rights be settled by bilateral treaties with nations concerned, and ought to keep on insisting on the three-mile limit for territorial waters. We can't give that away because it's too important to world peace."

● Another point on which a threat is eased by failure of the conference to agree is the present tripartite accommodation by which the United States, Canada and Japan regulate their North Pacific fisheries in the interests of conservation. Thus with no extension of the fisheries rights of coastal nations, the balance provided under the International North Pacific Fisheries Convention is not disturbed.

Soviet Fleet Shifts Aim To Bering Sea King Crab

● Soviet Russia's fishing operations off the Alaska coast in Bering Sea took on new character at the end of April—character threatening to the conservation of the King crab, one of the valuable natural resources of the North.

The Soviets, who have been trawling in eastern Bering Sea continuously since early in 1959, and with incredible intensity, determination and hardihood, in April suddenly shifted to the King crab concourse 28 to 30 miles due north of Amak Island.

Previously their fishing had been aimed basically at bottomfish, primarily sole, flounders, pollock, cod, with some halibut and probably an occasional King crab. These operations in this northerly area were visited early in April by the American trawler *Deep Sea,* carrying a party of Alaskan observers, including Tak Miyahara of the U.S. Bureau of Commercial Fisheries, Dr. William Smoker of the Alaska Department of Fish and Game, Howard Wakefield of Wakefield Fisheries, and Anchorage newspapermen and photographers.

They boarded the Russian mothership, were well received and talked with its officers. Their observations of the catch confirmed the Soviets' account.

● A fortnight later the *Deep Sea* and about a half-dozen other American King crab trawlers found the Russians fishing—presumably with a different outfit — 28 miles north of Amak Island.

The U.S.S.R. fleet appeared to be using both trawls and tangle nets—and when the American trawlers started to fish the Soviets set tangle nets throughout the area, effectively preventing the use of American trawls, which are damaged and destroyed when tangle nets are encountered.

● The Japanese crab vessels reached the area at about this time and started operations about 30 miles easterly of the center of Soviet and American activities. Japanese crabbing this season is expected to be approximately double that of the past few years, as the Japanese government this spring authorized a second mothership operation there, but required it to stand clear of the *Tokei Maru,* which has worked in the Bering for years. The newcomer also is enjoined from canning crab, in which the *Tokei Maru* is engaged, and is required to engage in freezing, the field in which the Americans specialize.

Hitherto American and Japanese King crab fishing in Bering Sea has been conducted along lines and with intensity in keeping with conservation requirements.

Added weight of the Russian exploitation of the resource is regarded as threatening to this biological balance.

Lowell Wakefield, president of Wakefield Fisheries and Wakefield's Deep Sea Trawlers, Inc., is quoted in the Alaska press as saying of the U.S.S.R. appearance on the King crab grounds: "The thing has happened which we feared, but hoped would not occur. This throws an entirely new light on the problems of the Bering Sea."

Mr. Wakefield announced publicly in Alaska that he would seek a conference with the Soviet fleet administrators in the hope that they would include their operations in a working agreement already in force between the Japanese and American operators, whereby a space of 10 nautical miles is maintained between the gear fished by the national fleets.

Japan Doubles Bering Sea Operations for King Crab

● Japanese exploitation of the Bering Sea King crab resource is being doubled this year with the licensing of a second operation, to be conducted by Hokuyo Suisan K.K., the corporation which pioneered the Japanese fish reduction venture in this same area.

Significantly, one of the conditions attaching to the grant of this second license requires that the vessel's fleet shall not operate on the same grounds as the vessels fishing for the *Tokei Maru,* the older operation; and, even more importantly, that its production shall be confined to freezing King crab, rather than to canning it, the field to which the Japanese previously have confined their King crab activities.

Five companies are understood to have besought the Japan Fishery Agency for authority to enter the Bering Sea crab business, Hokuyo Suisan K.K. winning the nod, perhaps as a reward for its enterprise in the development of the Bering Sea reduction industry. *Tokei Maru,* the long-time Bering crab canneryship, is a joint venture of three giants in the Japanese fisheries — Taiyo Gyogyo, Nippon Suisan and Nichiro Gyogyo. The 1960 license for *Tokei Maru* again was set at 70,000 standard cases, the same figure prevailing in 1959.

To mount its new venture authorized under the license, Hokuyo Suisan purchased the factoryship *Meisei Maru,* 5,651 gross tons, from Nichiro Gyogyo. The vessel has been engaged in the North Pacific salmon fishery, but is one of the four displaced this year in the reduction of the salmon operations.

● Intensity of King crab fishing in the Bering Sea is expected to rise sharply during the next few months, as result of step-up by the three nations involved—Japan, Soviet Russia and the United States.

Late spring saw the Soviet fleet of trawlers serving freezerships move south toward the area where King crabs are found in greater abundance. While there is no evidence that the Soviet fleet is seeking crabs specifically, there can be little question that the large number of big trawlers will take substantial numbers of crabs along with bottomfish.

Vessels of the Wakefield Deep Sea Trawlers, Inc., fleet moved into Bering Sea in April, following enactment by the Alaska legislature of a law designed to require any vessels delivering migratory high seas fish or shellfish in Alaska to abide on the high seas with Alaska fishing regulations applicable to adjacent territorial waters.

This would have limited the large vessels to 30 crab pots — an uneconomic number for such large craft—while they were fishing in the vicinity of Kodiak Island. Accordingly, they moved into Bering Sea, where the coastal regulations do not impose this restrictive gear limit.

Tuna Fishing Booms to Top 1959's Five-Month Tonnage

The booming tuna fishing business was recovering its pace again as this magazine went to press, after dropping off a little for a week or so. The Market News Service of the Bureau of Commercial Fisheries, noting a drop of 2500 tons or so for the week ending April 23 as against the same week last year, predicted that with arrivals the way they were showing up the following week, the total cannery receipts for January 1 to April 30, 1960, would be ahead of the same period for 1959.

As has been the trend since the first of the year, the chief factor in the heavy catch is the new fleet of converted purse seiners.

The *Normandie,* one of the biggest vessels in the fishery, with a capacity of 390 tons or so, was arriving in San Pedro as this was being written, with a full load caught in a 42-day trip. The *Dominator,* also a big one, brought in a full fare after a 45-day trip.

The fish seemed to have moved south in more recent weeks, and the temporary slowing down of fishing seems to have been because it took the boats a few days to catch up with the schools. Biggest catches late in April were being made south of Tehuantepec, off the coast of Guatemala. Previously, the richest harvests were being made off the isthmus.

An interesting experiment was being carried out in tropical waters. The clipper *Mayflower,* doing service as a reefer ship for the converted purse-seiner *Santa Helena* (formerly a clipper) had been loaded with fish from the *Helena* at Punta Arenas, Costa Rica, and was on her way home manned by a non-fishing skeleton crew, while the *Helena* herself stayed on the fishing grounds to catch another load, which she will bring home in her own holds.

This seiner-reefer method will be watched closely, and if successful may be adopted more generally as a means of increasing the return of fish per unit of effort and bringing down the cost of delivering US-caught fish to US canneries.

Bluefin Absent

Last year about this time there was a sizable run of Bluefin in local Southern California and Mexican waters, but this year no sign has been seen of any similar run. Water temperatures have been slightly lower in Southern California this year than last, and it is a logical speculation that this may have caused the fish to move to more congenial climates, perhaps farther south.

The absence of local Bluefin, together with the lack of orders from canneries for cannery mackerel, has caused a tie-up of the San Pedro mackerel fleet, which would possibly be fishing for Bluefin if there were any around. It is considered likely that the price of mackerel may be renegotiated before the local fleet goes fishing again.

The dropping off of the tuna fishery was reflected in the figures published by the Market News Service for the week of April 10 to 16. The 1960 total Southern California cannery receipts for that week were 5412 tons, as against 6703 tons for the same week in 1959. These figures include imports of 2644 tons this year, compared with 1190 for 1959.

The total California receipts, including some imports through San Francisco, were 62,273 tons for the period from January 1 to April 16. This was slightly under the 1959 total of 66,630, but well over the previous year's 53,754 tons. San Frnacisco imports were about the same this year as last, 3220 for 1960 and 3401 for 1959.

Seiner Catch Up

The Market News Service, breaking down the catch between converted and "regular" seiners, noted that between January 1 and April 16, the conversions caught 10,303 tons of tuna in 42 trips, while the "regulars" landed 12,452 tons in 99 trips. Last year, when there were nowhere near as many converted seiners in the water as there are this year, the conversions caught 1876 tons in eight trips, and the "regulars" brought in 12,022 tons in 84 trips.

Based on these reports, the average catch for a converted purse seiner is, at this writing, 245 tons; for a regular seiner, 121.4 tons. But all the seiners, whatever their size, were having good fishing last month.

"PF's" Business Manager Studies Japan's Industry

Richard N. Crosby, business manager of *Pacific Fisherman,* will spend a month in Japan from early June into July, studying the fisheries of that country and the industries manufacturing fishing and processing equipment.

Thus he expects to visit the great fish producing and exporting companies, synthetic fiber and fish net manufacturers, makers of electronic instruments designed specially for use in fishing, and producers of other goods employed in the marine industries.

Mr. Crosby's mission extends *Pacific Fisherman's* policy of having members of its staff maintain frequent, close and personal contact with the great fisheries of the world, and a first-hand understanding of current trends in international fisheries.

While in Japan Mr. Crosby will work in close cooperation with the Japan representative of *Pacific Fisherman* and other *Miller Freeman Publications,* Mr. Kenji Sakai, 2507 Kichijoji, Musashino-shi, Tokyo.

New African Bases for Van Camp, Star-Kist

Reports were published last month to the effect that both Van Camp Sea Food Co. and Star-Kist Foods had made definite arrangements to acquire fishing bases on the west coast of Africa for receiving Atlantic-caught tuna.

Van Camp, it was reported, had purchased an existing cold storage plant at Freetown, in Sierra Leone, a British possession. This plant, it was said, had been enlarged from 150 to 500 tons capacity and would eventually be expanded to 3000 tons.

By arrangement with the Taiyo Co., it was reported that three vessels had landed fish at Freetown for transport to the Van Camp cannery in Puerto Rico.

It was also reported that Star-Kist was going ahead with plans for a fishing base and cold-storage facilities at Eima, in the independent republic of Ghana on the African West Coast.

Reserves-in-Depth—

Salmon Industry's Tactics Facing 1960 Uncertainties

● Alaska salmon operators faced a pack of uncertainties in May as they were putting the final polish on their preparations for the 1960 season.

Any one of these uncertainties gave a gambling aspect to Alaska operations. Taken together, they made it chancy as a slot machine.

But salmon packers and fishermen are the sort to take chances. They wouldn't be in the salmon game if they weren't; and they were going North this month and next prepared to sit-in on the game, no matter what the deal.

The perplexing angles of the 1960 salmon season are particularly acute to Westward, and that's where much of the interest centers.

● What are the uncertainties which make 1960 more uncertain than other seasons?

First of all of course is the Fisheries Research Institute forecast for a Bristol Bay run above 30 million fish; and the sharp disagreement of some other observers.

Second is the degree to which the Japanese high seas operations will bear upon the total run; and how many fish out of the year class will survive the ocean fishery to migrate to Bristol Bay to support the American fishery and produce the future cycles.

Third uncertainty at presstime was the severity of the program which the U.S.S.R. would force on the Japanese for 1960; for this governs in great part the intensity of the Japanese fishery in the Area of Intermingling, where their catch consists largely of salmon of Alaskan origin.

Fourth question is concerned with the ability of the American fishermen under the limitations of the new Alaska regulations for Bristol Bay to take a realistic proportion of a heavy run, if it does occur.

Fifth, there's the question of the policy of the Alaska Fish and Game Board with respect to modification of the regulations to permit cropping the surplus of such a run above the full requirement for spawning.

● Notwithstanding these uncertainties, Alaska salmon operators and fishermen—particularly those whose activities focus to Westward—may be expected to mount a highly effective campaign, marked in particular by its reserves against contingency.

Preparations for Alaska salmon fishing and packing in 1960 are characterized by painstaking planning, coordination, and an unusual amount of staff work.

Details won't be available for a month yet, but these points are evident:

Operations, including plants and fishing boats, will be planned and equipped to a degree of efficiency never approached in the past.

Reserves of capacity "in depth" are designed to permit large increase in ability to pack, if the predicted big run materializes and the Alaska authorities permit harvest of its surplus.

Seaton Permits Alaska Native Traps

● In spite of the sharply-expressed opinion of the great majority of Alaskans as expressed in House Joint Memorial 50 of the recent legislature—Secretary of the Interior Fred Seaton proposes by special regulations to permit Alaska native communities to operate as many as 11 salmon traps if they so desire.

In his announcement of his intention, Secretary Seaton says the action is taken under Section 4 of the Alaska Statehood Act, which he construes to permit the native communities to use such gear under the fishing rights guaranteed to them by the section.

He says in describing the 21 traps sites which have been used by the Metlakatla, Kake and Angoon communities: "The Supreme Court has enjoined the State of Alaska from interfering with native fish traps until it is determined whether these traps involve native fishing rights protected by the Statehood Act."

Saying that his legal advisors tell him the 21 traps are in fact "fishing rights" protected by the Statehood Act, the Secretary says: "I have no alternative but to permit these natives to operate these traps if they choose to do so . . . Only Congress could abolish the right created by the Congress."

● An anomaly of Secretary Seaton's action is that, while maintaining that he has no right to forbid the native communities from operating their traps, and naming 21 sites, he *does* restrict their operations to 11 traps, the same number he permitted in 1959, the last year of Federal control over the Alaska fisheries as a whole.

Mr. Seaton's regulations aroused sharp resentment in Alaska, where a statement issued by the office of the attorney-general charged that they invoked racial discrimination, and sought "on the basis of race"..."to exempt persons of Indian or Native blood from state fish and game regulations."

The attorney-general's office statement charges that Secretary Seaton's regulations are "an attempt to retain control of Alaska fisheries."

It concludes with the statement:

> *"No resource can be taken from the people as a whole and given to a group as a special privilege, particularly when the basis for the discrimination is race, creed or color."*

Assn. Manager Dies

Horace Andante, 64, manager of the Monterey Small Boat Fishing Association, and well known in the West Coast fish industry, died at his home in Monterey after a long illness.

He was born at Isola del Femine, Italy, and came to Pittsburg, Calif., at the age of four with his parents. He leaves a wife, Frances, a son, Vincent, both of Monterey; a brother, Nino, Pittsburgh; and three sisters, and five grandchildren.

World's Growing Catch, Plus Fish Competition, Keynote For Canadians

Rising costs of production, increasing world competition and consumer resistance to higher prices have presented the Canadian fishing industry from coast to coast with a complexity of problems seldom duplicated in its history, President Roger T. Hager told delegates to the 15th annual meeting of the Fisheries Council of Canada.

The three-day meeting, held in Hotel Vancouver, saw the largest attendance in the association's records, more than 650 delegates being registered. All sections of the industry throughout Canada were represented, with a sprinkling from the U. S. and other countries. Discussions covered a wide range of subjects, from inspection and marketing to oceanography, pollution, tariffs and trade, refrigeration and unemployment insurance.

In his presidential address, Mr. Hager, who in private life is president of Canadian Fishing Co., reviewed conditions in the industry throughout the world as well as in Canada, emphasizing the dependence of Canada on export markets and her vulnerability to the competition of lower-cost countries.

"Overall, Canada has maintained her production during the past six years," said Mr. Hager, "but it is obvious that many countries are commencing to place extra emphasis on their fishing efforts and the increase in the world catch of 35% between 1953 and 1958 is a clear indication of this. We are faced with a growing world catch and an intensified fishing effort by many of the major fish producing countries.

"One of the direct effects of this greatly increased world production is in the world market price for fisheries products. It is a fact that, while many countries are stepping up production to increase their supplies of protein, some of these, and other nations as well, are increasing the amount of product which they are exporting. The U. S. market—a dollar area—is an attractive target.

"The U. S. market has been a steady one for Canadian producers for many years. One half of our total sales dollar is derived from sales in the U. S. Canada has had a trade deficit with the U. S. for many years. In 1958, the U. S. purchased $2.8 billion worth of goods from Canada; Canadians bought $3.5 billion worth in return. Put another way, every person in the U. S. spent $16.25 on Canadian goods, while every person in Canada spent $209.55 on U. S. goods. Because of increased and cheaper production in other countries, the U. S. is becoming a more difficult price-market for Canada, since we have a relatively higher cost economy."

Examples of the costly effect of this competition were the suspension of the herring and whaling industries in B. C. due to lower prices for products from other countries.

"Particularly on this coast," continued Mr. Hager, "we are under a continual pressure to raise prices for the raw product. Surely by now people must realize that there is a limit. I should be very surprised indeed to find that any fishing company in B. C. operated at a profit during the past twelve months.

"Prices for the raw product, however, are only one aspect in the cost structure, although the most important. To maintain our fleets, in competition with foreign vessels which are built much more cheaply, is becoming increasingly difficult."

Mr. Hager told of the high cost of building vessels in Canada and the difficult plight of the shipyards, but he said that unless building costs of fishing vessels in Canada could be reduced the government should take action to reduce the restrictions on the importation of required tonnage, his reference being particularly to the east coast, where the preference is for steel trawlers, none of which has so far been built in a Canadian yard.

"Dependence on export markets is a built-in hazard; we have always had it and I think it will remain with us," said Mr. Hager. "We are trying to increase consumption in Canada and to make the home market a more potent factor, but to make it the main market would involve the realization of a very substantial increase in the per capita consumption. Perhaps we are not working hard enough at this problem.

"We have, however, some advantages and we should capitalize on them to the limit. We are close to the source of supply and close to our markets, for the perishable proportion of our production."

ROGER T. HAGER, president of the Fisheries Council of Canada at its 1960 convention in Vancouver, B.C.

One of the most interesting discussions—on the value of the Canadian Government Specifications Board standards — was in the hands of a panel for which James Sinclair, president of the Fisheries Association of Canada, was moderator, comprising J. N. Hyland, B. C. Packers; D. F. Corney, Keystone Fisheries of Winnipeg, H. D. Pyke, Lunenburg Sea Products, and A. H. Myrvold, Toronto wholesaler.

While there was some disagreement as to details, there was considerable evidence that the Canadian consumer had been indifferent to the certification as to plant inspection and product quality, after the first year's operation of the program. It was evident that an extensive, and perhaps costly, program of consumer education was imperative.

Mr. Hyland said, however, that if his company had to make the decision again as to whether it would voluntarily join the CGSB inspection program there might be some hesitation. The objective had been to increase markets as a result of the impact of a quality control system, but results after a year's trial had fallen short of expectations. It had cost B. C. Packers $140,000 to make the required plant changes and operation would cost about $100,000 a year, yet there was little evidence that consumers had been appreciably impressed.

Pacific Fishery Technologists' New Officers—From the left, Claire Egvedt, Columbia River Packers Association, Oregon trustee; Walter Yonkers, National Canners Association, secretary-treasurer; Jeff Collins, U.S.B.C.F., Alaska trustee; Maurice Stansby, U.S.B.C.F., president; Rolland Fitch, Westgate-California Tuna Packing Co., California trustee; Dr. A. M. Dollar, University of Washington, trustee for Washington. Jack McBride, Canadian trustee, was not present.

RSW

How Refrigerated Sea Water Aids The Fishing and Packing Economy Of Pacific Shrimp, Sole, Salmon

R.S.W.—

● *Refrigerated Sea Water* and its application to fishing, whether aboard the fishing vessel or in the plant, was the topic of sharpest interest at the 11th annual conference of the Pacific Fisheries Technologists, held March 27-30 at Gearhart, Ore.

Second spot of interest was won by packaging of two of today's fast-running materials in this field—impermeable plastic films and aluminum.

By their interest in such subjects the technologists reaffirmed their primary devotion to the application of technology to industry, its products, its problems, and even to its profits.

● The 1960 meeting elected Maurice Stansby, chief, U. S. Bureau of Commercial Fisheries Technological Laboratory, Seattle, chairman; with Walter Yonker, director, Northwest Branch, National Canners Association, secretary-treasurer. They succeeded Fred Jermann and Duncan Law of Astoria.

Regional trustees elected were: *Alaska,* Jeff Collins, U. S. Bureau of Commercial Fisheries, Ketchikan; *Washington,* Dr. Alexander M. Dollar, College of Fisheries; *Oregon,* Clair Egtvedt, Columbia Rivers Packers Association, Astoria; *California,* Roland Finch, Westgate-California Tuna Packing Co.

RSW is Top Choice for Shrimp

● Refrigerated sea water application to Pacific shrimp processing and its effect upon peeling, shrinkage and quality, as determined at the Ketchikan laboratory of the U. S. Bureau of Commercial Fisheries was detailed for the technologists by Jeff Collins, who reported that in industrial application the use of RSW seemed much superior to holding in ice. Loss in yield was virtually identical in each method. Good preservation to 6 days for 3% sea water was reported, with at least two days in RSW at 30° required for satisfactory peeling. The 13% loss in solids during this conditioning period was suggested as one of the significant cost factors in Pacific shrimp packing.

In the discussion developed by Mr. Collins' talk George Moskovita, head of Pacific Shrimp, Inc., and one of the pioneers in fishing Pacific Ocean pinks, said he was extending the RSW installation in his plant to the vessels serving it; and that the shrimp thus would be held in refrigerated sea water from the moment of catching.

George Moskovita, president of Pacific Shrimp, Inc., a strong advocate of the use of RSW for the protection and conditioning of Pacific Ocean Pink shrimp.

Max Loewe of Star-Kist Foods, Inc., left, and **Dr. John Liston,** head of the technology division of the University of Washington College of Fisheries, argue a point at the Pacific Fisheries Technologists' meeting at Gearhart.

RSW Benefits in Trawl Fishing

● The practical fisherman's approach to RSW application to bottomfish preservation was presented by Paul Autio, fisherman and fur farmer, who was one of the pioneers in applying sea water chilling to trawl fish, first

George Wilkinson of the Coast Fishing Co., Wilmington, Calif., attended the Pacific Fisheries Technologists meeting as an interested representative of "Puss 'n' Boots."

aboard his fishing vessel, *Marie H.*, and subsequently on the schooner *Western.*

With the remark that: "Mink are more particular about quality than are human beings," Capt. Autio told of his experience in applying sea water chilling to trawl fish, where he found the problems somewhat different from those with salmon. He keeps his sea water at 29°, and occasionally uses fresh water from the Astoria system with 2% salt to permit pulling down the temperature before reaching open sea. (Columbia River water is too turbid to be used satisfactorily.)

Acronize is added to the sea water as recommended by American Cyanamid Co., and with it Capt. Autio's vessels are able to keep fish in good condition to two weeks, although this is not done in practice.

Fish is usually landed within four days, when condition is excellent; and sometimes the fish are actually still alive. Tendency of ocean perch and other rockfish to float up in the tanks requires the tanks to be filled with fish before the circulation of RSW begins.

With five tanks—two on either hand and a long one on the centerline, to which fish are drawn for discharge—boat stability is good. One to two men are saved in the crew; and all unloading is done by power brailing from the centerline tank. Tanks are built of Harborite waterproof plywood, 1½" floor, 1¼" walls, ¾" top, protected with plastic coating. Tanks are fitted with chimneys, which should be large enough to admit a brailer to permit individual brailing.

Paul Autio, a leading advocate of the use of refrigerated sea water for the protection of trawl fish catches, telling the technologists of his success in the practical application of this method to bottom fishing.

Fish landed after RSW handling command top prices and are not subject to deduction for ice and slime, which is a moderate bonus for quality.

RSW Dividends of Experience

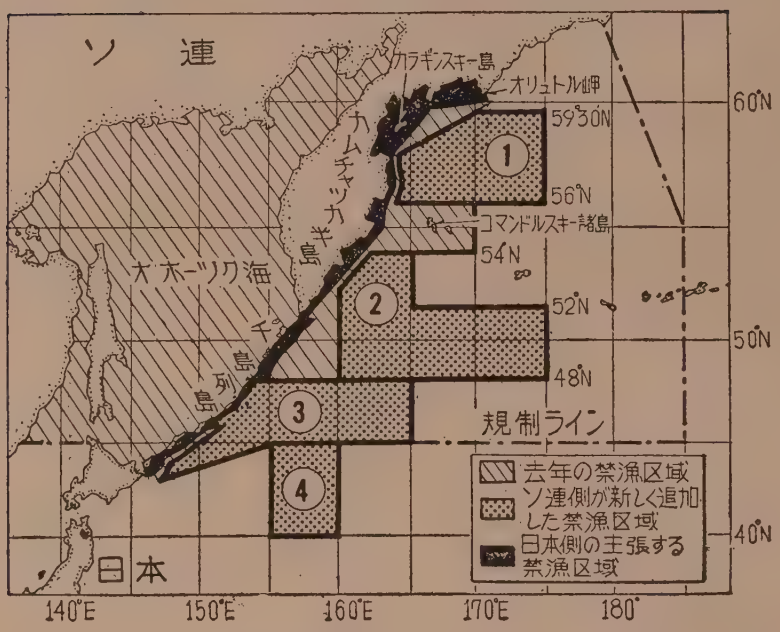
● Yield of the years in RSW application in the fisheries of British Columbia was recounted by S. W. Roach of the Fisheries Research Board of Canada who, with John Harrison, had much to do with the introduction of sea water chilling to the Pacific fisheries.

Briefed closely, some of his significant comments are these:

Advantages of RSW vary with variety of fish and application. . . Design of tanks demands care, and must not impair stability. . . Evaporators are very important, with shell-and-tube advanatges proven. . . Freon is favored in Canada as the refrigerant. . . Application of RSW to trollers presents some problems, due primarily to scaling of the fish, but this has been largely solved by modern methods. . . Practicability of installations in old halibut vessels is doubtful, but RSW systems for new halibut vessels are highly successful. . . In tenders the sea water chilling has proven an unqualified success, with virtually 100% application in Canada. . . United States leads in shore installations and those of trawlers. . . Salmon seiners have been highly successful on mature fish on spawning migration, but feeding fish, such as Cohoes, or "Bluebacks" as they are called in Canada, scale badly and tend to foul the circulating refrigerant. . . Herring bait keeps very well in RSW aboard halibut boats if the bait is not feedy . . . Absorption of salt may be a problem on small fish, but is not important on Sockeye salmon or halibut. . . Half-strength sea water appears to have advantages in this connection. . . Leaching in sea water is about the same as in crushed ice. . . Feeding Sockeye keep well for four days in RSW. . . Use of Acronize helps to extend this period.

Curd formation from salmon held unfrozen in RSW appears to be less than when protected in crushed ice. . . Antibiotics seem to be more effective if used in ice than in RSW solution. . . Circulation of the RSW over ultraviolet lamps in the germicidal wave length seems to have possibilities for keeping the bacterial count of the refrigerant at low levels.

Soviet Proposal for Closed Fishing Areas



Japanese fishing would be prohibited by a Soviet proposal in the numbered stippled areas. The diagonally-shaded areas were closed to fishing in 1959, and would continue closed this year. Suggested closure of the block numbered **4** is particularly significant, as it is here where the Japanese land-based gillnet and longline vessels have made heavy catches. Japan's counter proposal called for closure of the area shown in solid black, running from Hokkaido to a point near 170 E and 60 N.

Time's Current Carries Japan Against Deadline In Dealing With Soviet

● Inevitable May deadline, by which the Japanese must start their high seas salmon fishing or lose any hope of a profitable season, was exerting increasing pressure on their negotiators in Moscow when *Pacific Fisherman's* deadline passed.

The U.S.S.R.-Japan fishery pattern for 1960 was appearing in broad outline, but with the details still obscured.

Outcome of the long-drawn negotiations is of vital importance to Alaska's Bristol Bay fisheries, for the regulations finally accepted at Moscow probably will determine the degree to which Japan will fish in the sensitive Area of Intermingling where they take large numbers of Red salmon of Alaskan origin.

● As this was written it appeared the Soviet negotiators were suggesting that the Japanese catch in the Japan-Soviet treaty waters should be in the 50,000-60,000-ton bracket. (In 1959 the quota was 85,000 tons, but the Japanese were able to catch almost as much more outside the treaty area.)

The Soviet delegates also suggested a very large increase in the high seas area easterly of Kamchatka closed to Japanese high sea fishing. Further, and very significantly, they were proposing closure of a large square of sea to Japanese land-based gillnet and longline vessels. This area would extend from 40 to 45° North, immediately south of the tip of Kamchatka.

The Japanese countered with a proposal for complete closure of all coastal waters of Kamchatka, and a narrow belt lying easterly of the Kurile Islands. This would extend from the tip of Hokkaido to Cape Olyutorski.

● The Japanese emphasized a number of points in which they proposed to regulate their operations in the interest of conservation. These concessions to the Soviet complaints of Japanese practices included:

A program for control of dogfish and other salmon predators; reduction in the amount of private salting of salmon by fishing boat crews; limitation of high seas gillnetters' reserve nets to 70 shackles, which must be kept aboard the mothership;

Doubling the supervisory inspectors aboard motherships; supervision of all deliveries to motherships by a government official;

Land-based gillnet vessels would number 415; and their operations outside the treaty zone would terminate; increased size of craft engaged in this fishery would not be permitted;

Long-line salmon boats would be limited to 373 vessels; with a July 15 season closing; branch lines to the hooks would be larger than 0.522 mm. diameter.

Van Camp and Calpak Abandon Merger Plan

All plans for a merger of Van Camp Sea Food Co. and the California Packing Corporation have been abandoned after several months of development, it was announced in California in April in a joint statement by Roy J. Lucks and Gilbert C. Van Camp Jr., presidents of the two companies.

The statement said in part: "Although the managements were in basic agreement, certain problems developed which seemed beyond solution."

While there was no elaboration of the character of these problems by the heads of the corporations, spokesmen in San Francisco indicated that they were concerned with unwillingness of federal authorities to give the proposal clearance under the anti-trust statutes.

The two companies are among the world's largest canners of food products. Calpak's sales during the last fiscal year are said to exceed $345,000,000. Its business is largely in fruit and vegetable canning, although through its control of the Alaska Packers Association it also participates importantly in salmon canning. It has a sardine cannery at Monterey, but its activity in tuna in recent years has been confined to the marketing under its *Del Monte* label of limited quantities of tuna packed on its account by others.

Van Camp Sea Food Co. ranks among the largest of the world's fish canners, with sales of $59,600,000 in the last year for which information is available. It has canneries at Terminal Island, Calif.; American Samoa; Ponce, Puerto Rico; Manta, Ecuador.

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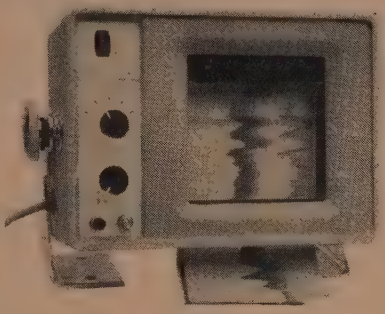

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How one Menhaden fleet keeps profits pouring in with Monel fish separators

The all-Monel fish separator shown above can handle 600,000 Menhaden per hour, from purse seine to mother boat. A net full of fish is brought aboard in half the time it takes with a bull net. One day's haul amounts to 100 tons!

Fish Products Company of Lewes, Delaware maintains this work load day in and day out during the five-month season . . . with the help of Monel* nickel-copper alloy. Other metals tested presented serious corrosion problems, needed expensive and too frequent repairs. Since a layup for repairs for even one day would be an expensive proposition, it's easy to understand why Fish Products chose rugged, corrosion-resisting Monel.

Four years ago, the first eight separators of Monel went into service, and are still in operation without a hint of trouble. Fish Products' superintendent says, "They look just the same now as when we put them in . . . look as if they'll last forever." Today, *all 27* of the mother boats in the fleet are equipped with Monel separators.

As Fish Products knows, when every minute counts, you can count on Monel to save time and money — to keep a workboat working season after season. Choose this strong, corrosion-resisting alloy for *all* marine fittings subject to hard use and corrosive attack. Check with your local supplier for prices and availability of seagoin' Monel products. *Inco trademark

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BUREAUCRATIC CAPRICE—

What's Wholesome in Ham is Forbidden in Fish

● Los Angeles Smoking & Curing Co. late in April filed with the U.S. Food and Drug Administration a request for an extension of the effective date of the Food Additives Amendment insofar as it applies to the use of sodium nitrate and sodium nitrite in curing fish and fish products, especially salmon.

So began the latest skirmish in a long industry fight to continue the use of an old-established and proven method of curing fish, especially salmon. That method involves the use of sodium nitrate and sodium nitrite (commonly called saltpeter) in the curing process.

Although the legal moves in this controversy have so far been made on behalf of the industry by Los Angeles Smoking and Curing Co., the problem is a vital industry-wide matter, because F.D.A. takes the position that the use of the nitrate salts is "not generally recognized as safe."

Los Angeles Smoking & Curing Co., on the contrary, holds that since nitrites have been used in curing food since time immemorial, and since LASSCO itself has used them for more than 25 years without a single complaint of adverse effect, the use of nitrites in the finished product in quantities of not more than 200 parts per million of nitrites in the finished product is not harmful, is generally recognized as safe, and the nitrites are therefore not a "food additive" within the meaning of the Food Additives Amendment.

A Technical Point of Law

● Last month's request for a time extension is the result of a previous court decision which denied a "declaratory judgment" to LASSCO in favor of continuing the use of nitrites in fish processing.

LASSCO had requested the U. S. District Court in the District of Columbia to issue a declaratory judgment declaring that the use of nitrites in quantities of less than 200 parts per million was generally recognized as safe.

The court denied the judgment on technical legal grounds, having nothing to do with the question of whether the use of nitrites is safe or not. Judge Luther W. Youngdahl, said the proper action would be for LASSCO to request a tolerance ruling from the Food and Drug Administration rather than trying to obtain it through the courts.

If FDA denied the request for a tolerance rulling, LASSCO could come back into court, Judge Youngdahl said.

It's Been Done for Centuries

● In its court petition, and again in its application for extension of the effective date of the Food Additives Amendment, Los Angeles Smoking & Curing Co., through its attorneys, brought out these facts:

Sodium nitrate and sodium nitrite have been used in curing fish, especially salmon, for many centuries—for so long, in fact, that nobody now knows when the practice originated.

LASSCO itself has been using a mild cure involving the use of nitrites up to concentrations of 200 parts per million in the finished product, for more than 25 years.

In that time, the company has sold enough nitrite-cured fish and fish products to make more than 100,000,000 servings without a single complaint of any toxicity in the product.

The nitrite process results in a finer texture, and better color in the process, and reduces spoilage.

The nitrite cure has proved so popular that it is now in almost universal demand, and the company (and the industry along with it) would suffer serious losses in sales and markets if the cure were abolished by law.

● In the case of meat and poultry, the Meat Inspection Division of the Department of Agriculture permits the use of nitrites in concentrations of up to 200 parts per million in the cure of meats and poultry. They are used traditionally in the cure of all ham. It is pointed out that here is one Government agency declaring the materials safe in meat and poultry, while another Government agency declares them not recognized as safe in smoked fish. (It is also pointed out that people eat a great deal higher poundage of cured meat or poultry at one time than of cured fish).

In its court actions, LASSCO introduced an affidavit from Arthur J. Pallotta, a Ph. D. in pharmacology associated with Hazleton Laboratories of Falls Church, Va., in which Dr. Pallotta declared that in his knowledge there was no report in published material on the subject of anybody ever having suffered ill effects from eating nitrite-cured fish or fish products.

Another affidavite, from Milo Don Appelman, chairman of the department of bacteriology at the University of Southern California, declared that sodium-nitrite is a condiment (The best-known condiment is sodium chloride or common table salt.) which, when used in curing fish and fish products in concentrations up to 200 parts per million, improves the flavor and texture of the product, acts as a bacteriostatic agent inhibiting the development of certain bacteria that contribute to spoilage, and acs to fix and improve the red color of the product.

Safe Tolerance Requested

● At various times during the fight for the mild cure process, it has been brought out that sodium nitrate is converted chemically into sodium nitrite during the curing process. LASSCO's present petition to FDA asks for permission to continue the use of nitrate in such quantities as to result in less than 200 parts per million of sodium nitrite in the finished product—a concentration of that salt which has been proved for years to be safe, and which is now permitted in meats and poultry by the Meat Inspection Division.

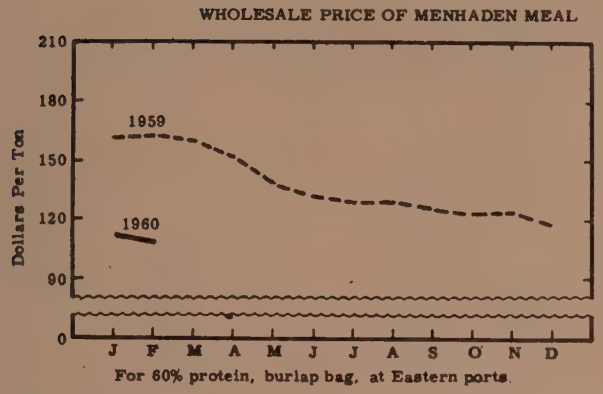
The time extension requested is to March 6, 1961. LASSCO explains that the additional time is necessary for the company to develop necessary scientific data to back up a petition for a tolerance ruling from the FDA.

Meantime, the company brings out, there is no substitute at hand for the nitrite mild cure, and to suspend the use of it now would cause great loss of business.

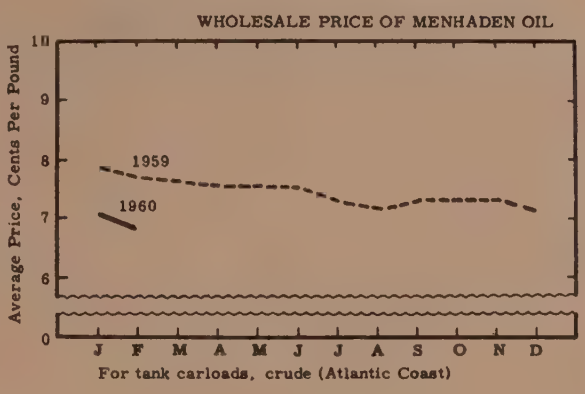
It shrould be apparent to everybody in the fish curing and smoking business that the loss of business threatened by the FDA through its position on the nitrite matter would hit not only LASSCO, bu every other firm in the business. This is a truly vital matter to the industry, and the fight for the nitrite process is one in which every fish curing firm should join.

What Ails Fisheries By-Products Today? PRICE

Charts prepared by U.S. Bureau of Commercial Fisheries show continuing decline below even the weak market manifest throughout 1959.



For 60% protein, burlap bag, at Eastern ports.



For tank carloads, crude (Atlantic Coast)

Union Fishermen's Tuna Operation is Initiated

Tuna canning operations were resumed late in March at the Union Fishermen's Cooperative Packing Co. cannery at Astoria, Ore., with Rolf Ostrem, manager, preparing for extension of the tuna division of the integrated packing plant while packing progresses.

Present operations are conducted on a combination ½-lb. line in which the loins can be diverted into either a solid-pack Carruthers Pak Shaper or a Pak Former chunk filler made by the same food machinery manufacturer.

Extension of the tuna cannery structure southward by 90' will permit straight-line operation of three lines with Carruthers machines handling solid and chunk halves and solid quarters.

In its new affiliation with the P. E. Harris Co., the Astoria plant is introducing *Peter Pan* tuna, utilizing this famous Harris brand in addition to the Union Fishermen's brands, famous in canned fish merchandising for more than 60 years.

Oyster Growers Prepare Anti-Pollution Campaign

Pacific Coast Oyster Growers Association late in April implemented a $20,000 educational campaign against pulp mill pollution in the State of Washington.

Edward J. Gruble, former president of the association and general superintendent of the Hilton Sea Food Co., was chosen as the association's director of publicity to direct the campaign.

Earl R. Branner of Olympia is president of the growers' association.

Bendiksen Firms Acquire Former Whitney Location

Having acquired the office building and moorage facilities of Whitney & Co. at 1455 Northlake Place, Seattle 3, E. H. Bendiksen Co., East Point Seafood Co., and Queen Fisheries, Inc., moved there from the Lyon Building in downtown Seattle, where they have had their headquarters for years.

Office of Whitney & Co. is now in the Logan Bldg., Seattle.

The Northlake Place property is unique in the North Pacific fish business, being a specially built office building for fish canning companies, designed in the most modern style, and with fleet mooring facilities in immediate connection.

1-Lb. Chunk Filler Produced by Carruthers

The line of Carruthers Pak-Formers, the chunk-filling machines for tuna, recently was increased to four models when the E. H. Carruthers Co., Warrenton, Ore., added a Pak-Former for 1-lb. flats.

The Pak-Formers are now available in ¼-lb., ½-lb., ¾-lb. and 1-lb. sizes.

Washington Crab Assn. Accused by Federal TC

Charges of unlawful restraint of competition were brought against the Washington Crab Association of Westport, Wash., and its officers and 250 members in April by the U.S. Federal Trade Commission.

The complaint, which names 11 officers specifically, holds that the association for two years have coerced dealers in crabs and non-member fishermen to join the association. It is charged that the main purpose of the association is to fix prices received by its members.

Frank Bell, Former U.S. Fish Commissioner, Guilty

Frank T. Bell, who was United States Commissioner of Fisheries, heading the old Bureau of Fisheries, during the early years of the Franklin D. Roosevelt administration, was convicted of perjury on five counts by a Washington state superior court at the end of March.

The charges grew out of Mr. Bell's testimony before a grand jury investigating allegations of bribery in connection with the construction of the Priest Rapids Dam on the Columbia River.

Mr. Bell resigned as U. S. Commissioner of Fisheries when the Bureau of Fisheries was being shifted from the Department of Commerce to the Department of the Interior, of which Harold Ickes was then secretary.

Before becoming Commissioner of Fisheries, Mr. Bell was secretary to C. C. Dill, then a United States senator.

Mr. Bell was sentenced to serve not more than 15 years in prison.

Twin-Disc Reports On Pacific Crabbing

Current issue of "Production Road," house organ of the Twin Disc Clutch Co. devotes its leading article to Pacific crab fishing, for whose fleet Twin Disc has provided hundreds of clutches, reduction and reverse gears and the power take-offs which are indispensable for driving the pot hoists from the main engine, as the average crabber is much too small to afford the luxury of an auxiliary engine for this purpose.

Pacific Fisherman is happy to have had a small part in the development of this interesting article.

"I always carry a couple of cases of WD-40 in my supply room"

says **JOHN ALEXANDER**, engineer on the big tuna seiner **SUN JASON.**

"WD-40 is the best rust inhibitor I've found. I use it everywhere. For instance, I spray it on electrical motors. It keeps them running, saves me work, worry and expense. The spray cans are very convenient. I carry one in my pocket most of the time, and use it as I go. I never sail without a case or two in the supply room".

The *Sun Jason,* fishing for Breast-O'-Chicken Tuna, is based in Paita, Peru. Commanded by Capt. Jack Borcich, she is 130 ft long, all steel, one of the biggest vessels fishing South American waters.

Sold in marine and hardware stores through the following distributors

Adams Laboratory, 317 N. Santa Anita, Arcadia, Calif.
Rocket Distributing Co., 1485 Bayshore Drive, San Francisco 24, Calif.
Joseph F. Taraba Co., 1824 S.E. 50th Ave., Portland, Ore.
Joseph F. Taraba Co., 1016 First Avenue South, Seattle, Wash.

Manufactured by ROCKET CHEMICAL CO., Inc. 4674 Alvarado Canyon Rd., San Diego 20, California

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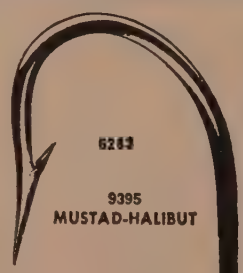

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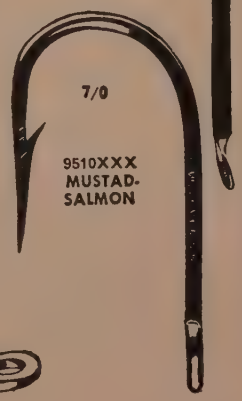

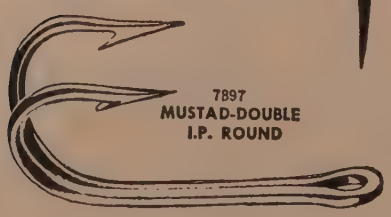

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BELMAR, NEW JERSEY

PACIFIC Fisherman's NEWS

MAY 1960

Area 3B Halibut Catch for April Above 5 Million

● Halibut production from Area 3B during the special no-quota season commencing April 1 exceeded 5,000,000 lbs. by the end of the month.

This figure reflects the data of the International Pacific Halibut Commission, and is concurred in closely by the fishermen and dealers.

Fishing was quite good and weather reasonably favorable, but approximately 80 big vessels were engaged in making the catch. Average production per skate set apparently was much below that of 1959, when the fleet was substantially smaller.

Vessels which brought their fish to Seattle, Vancouver and Prince Rupert for sale all were expected to make their second trip to Area 3A, lying easterly of the Shumagins and extending as far as Cape Spencer. On the other hand, there was a group of the vessels which fished Area 3B which sold their catches at Sand Point and apparently returned into Bering Sea for a second trip.

Close observers of the fishery doubted if the high rate of production from Area 3B would be maintained, and forecast that the catch for the year from the waters to Westward would be closely in line with that for 1959.

The ratio of large halibut into the 3B catch was notably down from last year, reflecting the heavy withdrawals from the stock at that time. This fact, together with the low prices prevailing, is expected to have some influence in restraining vessels from going into the no-quota area in the early fall following the closure of fishing in the quota grounds.

Market prices for halibut were disappointing at all points. A good market had not been expected, but buying opened lower than was looked for, particularly at Vancouver. A number of the first boats reaching that port refused the bids offered and took their fish to Seattle for the next day's market, where the price was little better.

Manuel Luz, with **Bill Horner** co-skipper of **American Boy.**

Storms Restrict Initial Trolling To Alaskan Area

● Weather delayed significant troll salmon production in the first weeks of the season, save in Southeast Alaska, and to presstime there was no possibility of appraising early production.

Market interest to the end of April was something less than avid. Supplies in smokers' hands were reported adequate for the moment, and the Pacific trade generally was inclined to feel that the industry had been fortunate to get through the above-average packs of recent years without disaster.

Alaska trolling was fair at the start of the season.

From British Columbia south to San Francisco-Monterey the weather was too violent for effective fishing.

● Export interest in mild cured salmon—and frozen also, for that matter—was unusually good this spring, but only at prices below the realistic level; or so it seemed May first.

European countries are again taking real interest in Pacific mild cured Kings and frozen Silvers; but whether they can, or will, afford the fish at probable price levels is something which remains to be seen.

Eureka Crab Fleet Recovers from Storms

Angelo Intersimone, manager, Tom Lazio Fish Co., Eureka, Calif., reports that crab production was back to about 50% of normal after the disastrous storms of February. The Red Cross, Small Business Administration and private finance helped fishermen in the area to replace their gear.

Mr. Intersimone states that the Tom Lazio Fish Co. expected to start canning crab meat again very shortly.

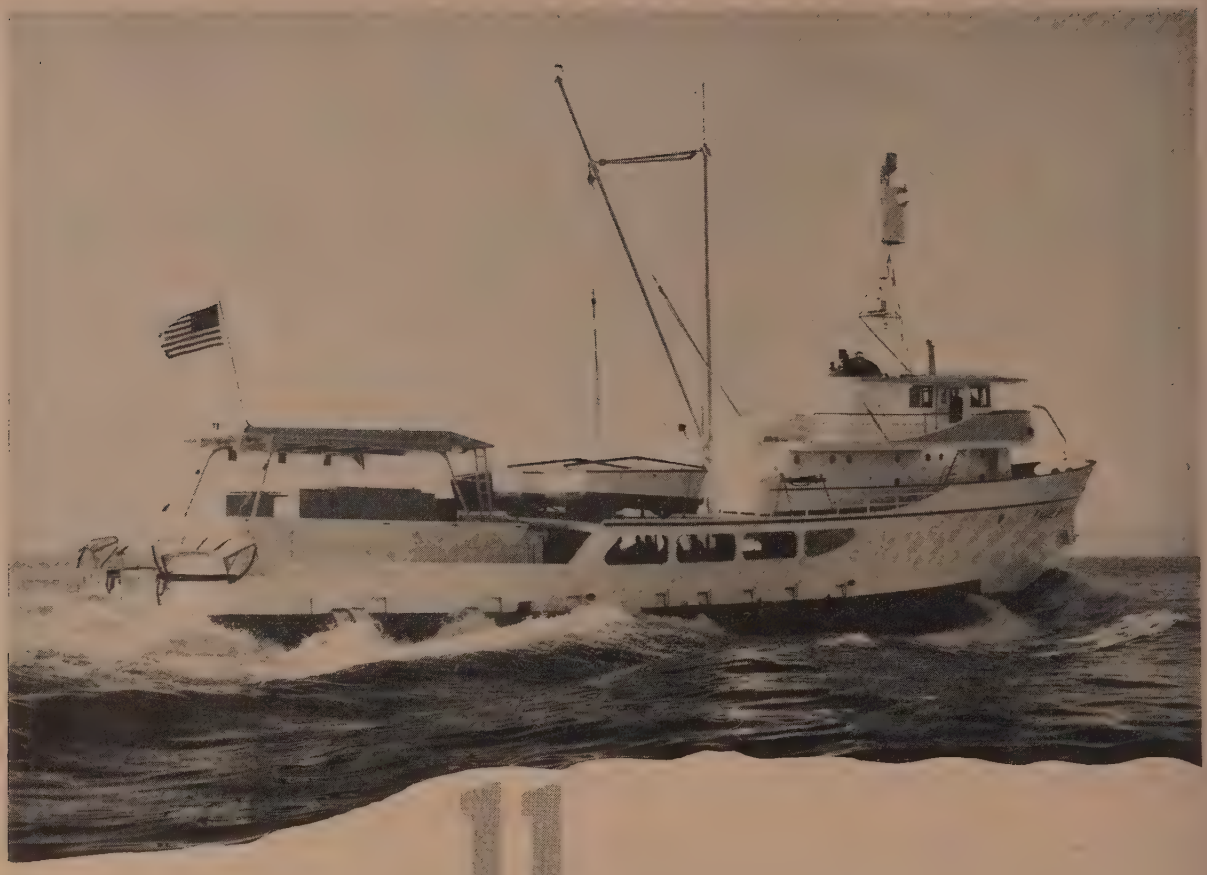
"Commander" and "Renown" on 5-Months Tag Job

To continue studies of salmon migration on the high seas, two research vessels of the University of Washington College of Fisheries departed Puget Sound in April on a five-month salmon-tagging voyage along the entire length of the Aleutian Islands from Unimak Pass to Attu.

The cruise is part of a long-range salmon migration study conducted for the International North Pacific Fisheries Commission by the Fisheries Research Institute of the college. Now in its fifth year, the project involves a $256,000 contract.

The chartered purse-seiners *Commander* and *Renown* will make the voyage. University scientists on the *Commander* will be Allan C. Hartt, senior fisheries biologist, and Michael Dell, assistant biologist. The vessel will be under the command of Capt. Clifford Anderson. On the *Renown,* the scientists will be Ben F. Jones, senior biologist, and Michael Dahlberg, assistant biologist. The vessel commander will be Capt. Birger Hansen.

Dr. William F. Royce, director of the Institute, will not accompany the party, but he plans to join them for a period this summer.



"MARY BARBARA" 11th NASSCO tuna clipper with MURPHY DIESEL AUXILIARY POWER

National Steel & Shipbuilding Co., of San Diego, has again equipped a new tuna clipper with Murphy Diesel Auxiliary power. In the 127-ft. "Mary Barbara", as in her sister ships, each of her two 191 HP (continuous) Murphy Diesels drives a 125 KW generator.

On a ship like the "Mary Barbara", which can cruise 6000 miles and averages a trip every 72 days to her South American fishing grounds, *dependable* power for refrigeration and other electrical equipment is vital. Selection of Murphy Diesel Generator Sets for 11 NASSCO clippers proves Murphy reliability and trouble-free performance.

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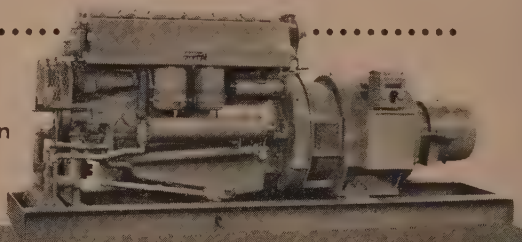

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PACIFIC FISHERMAN'S NEWS

MAY 1960 Volume 58 Number 6

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69 Halibuters Leave Sand Point at Once

One of the most striking sights the Shumagin Islands ever have known—at least since the departures of the Russian sea otter brigades—was the simultaneous sailing from Sand Point April 1 of 69 large Westward halibut vessels.

The fleet had assembled for the opening of the special month-long halibut season in Area 3-B. Due to the numbers, there was pressure for validation of licenses and the skippers voted that all should wait until the last license was cleared before any should depart.

With the last validation a signal was sounded and the vessels were free to clear for sea. Arne Johnson, manager of the Aleutian Cold Storage Co. at Sand Point, reported that approximately 40 schooners cleared the harbor in the first hour.

"The boats were moored so thick at the cold storage dock that a gale of wind would have pulled the plant out by the piling," Mr. Johnson telephoned the company's Seattle office.

Swanson Delivers 36' Combination Boat "Hi-C"

Swanson's Boatyard in Shelton, Wash., recently delivered a new 36' by 10'6" combination vessel for Melvin Martin, who intends to use the craft, named *Hi-C*, for fishing operation as far as Alaska. In July it will switch to charter fishing at Westport, Washington. Power is a GM diesel, and the boat has controls in wheelhouse and flying bridge.

Newly-repowered with a turbo-charged Waukesha diesel rated at 290 hp., the veteran halibut schooner **Yakutat** sets out to Westward at a nice pace. With her are pictured, right, **Capt. John Sellereit,** her master, and his brother **Irwin,** chief engineer on the seiner **Pacific Pride.**

"Yakutat" Goes Modern With Turbo-charged Diesel

Sporting a new coat of paint and, more important—*much* more—a new power plant, the halibut schooner *Yakutat* went north this spring faster than ever before.

During the winter and spring John Sellereit, skipper, and his brother Irwin, who is engineer on the *Pacific Pride*, installed a new Waukesha 290-hp. diesel. Skipper John mourned the loss of the old engine like the passing of an old friend, and an old friend it really was. The new engine replaced a Washington diesel installed in 1924—serial No. 7. Thirty six years with the same power plant is quite an accomplishment.

However, on the run to Ketchikan heading out for the early 3-B halibut season, *Yakutat* made better time than ever before, and at easy engine speeds. The new engine is a Waukesha, turbo-charged, of the Resolute series, rated at 290 continuous horsepower, turning a 59x40 Olympic wheel through a Model 512 Twin Disc 4:15 to 1 reduction gear.

Yakutat is one of a disappearing fleet of halibut schooners. Seventy feet long, with her wheel house aft, she was built in 1913 and has been going strong ever since. Always a high-liner, *Yakutat* has hailed some of the fares of halibut taken out where the going is always tough far to the Westward.

John Sellereit, present skipper, comes by his job naturally, having been raised in a family of fishermen; and he takes great pride in his boat and her gear. *Yakutat* steps out this spring at a much faster pace, but with the old skills and stamina for a tough service.

Crab Boat Burns

The 42' crab boat *United No.* 1 was destroyed by fire some 20 miles north of Eureka, Calif., last month. Aboard were skipper Don "Buzz" Sparks, Trinidad, and an unidentified boat puller. Owner is Harry P. Sorenson, Alton.

ILENE Leads the Grand March With the First Halibut of 1960

Capt. Arne Madsen, young Seattle skipper who is chalking up some interesting records with **Ilene,** which he owns with his father, **Capt. Matt Madsen.**

● *Ilene* was the first home with fish in the Seattle halibut fleet, delivering 66,000 lbs. of Bering Sea halibut to Seattle April 15, two weeks, plus a day, from the opening of the special no-quota season in Area 3B, out beyond the Shumagins.

This same Madsen boat, owned by Capt. Matt Madsen, member of this International Pacific Halibut Commission, and his son Arne, is generally credited with being high-boat of the Seattle fleet. Captain Arne Madsen, her skipper, was driving her hard again as the 1960 fishing opened, and for the second consecutive year the 32-year-old vessel was fishing to Westward. Prior to 1959 she had been a typical "Local" boat. Now in her old age she's reaching out beyond the Shumagins, through the Chain, and fishing the Polaris Edge in Bering Sea.

● Before we talk further about that, let's ask about her first trip in 1960.

She sold 66,000 lbs., of which 60,000 were mediums, 5,000 large and 1,000 chickens, to Washington Fish & Oyster Co. for 20.1¢, 21.9¢, and 17¢.

Capt. Madsen said the fishing, while good, was only half as good as on the first trip of 1959, when some sets yielded 1,000 lbs. This year some yielded 500 lbs., and that was about tops.

There were many more boats fishing, 75 to 80, about evenly divided between Americans and Canadians, and often a boat could run only 8 or 9 skates, so great was the congestion on the favored grounds.

Moreover, the fish ran small, averaging between 30 and 35 lbs., with only about 8% large. The fleet found the best fishing in deeper water than usual, with most of the gear run at from 210 to 260 fathoms. The *Pacific Belle* saw one Russian vessel on the grounds, but the main Soviet fleet apparently was still working on the flats, further north and east.

● Now about *Ilene's* new ability to work out to Westward, where the Americans and Canadians occasionally find Japanese and Russians fishing the same grounds with them:

Last year Capt. Madsen repowered *Ilene* with a General Motors diesel, replacing the old slow-speed diesel which had served her long and well. Power was greater, but engine size and weight was so much less that he gained space in the hold for between 4,000 and 5,000 lbs. of halibut.

He wanted that space for fish, but he also needed it for fuel if he was to run to Westward. So he kept the space gained in the hold for fish and had tanks built to fit the curve of the rail alongside the house forward of the break in the deck and almost to the stem. The bulwarks were cut down to accept the tanks, which rose considerably above the former rail, giving more protection forward.

"We really needed it, too," Capt. Madsen says, "for with the added speed from her new engine we'd have shipped an awful lot of water over the old rail."

The two topside tanks take 1,100 gals. of fuel, raising her total bunkerage to 4,200—"And we use those rail tanks for more than mere capacity," the skipper says. "They are very useful for trimming the vessel as we load up; and when she's full of fish we keep the forward tanks full and the stern tanks empty. Thus she's trimmed for running even when she's loaded to capacity." Maybe that's why *Ilene* was home first this year, but Arne doesn't say so.

He uses the "Jimmy's" fuel circulating feature to put the fuel reserve where it will do the most good. Thus he draws from the stern tank and returns that which by-passes the injectors to the forward tanks.

Going north to Ketchikan light, the rail tanks are empty. Then when the vessel has her ice and bait aboard he fills the upper tanks and takes her out with her head down where she drives best.

● In her first season with her new G. M. diesel, *Ilene* landed 20,000 lbs. *more halibut* than she could have done with her old engine, merely by utilizing the space gained by the compactness of the modern motor. "Of course you have to have good fishing to do that," Arne Madsen is quick to point out. "You can only do it when you can fill the boat to capacity; but last year we *could.* And by putting the tanks on the rail we kept the space gained in the hold for fish—at the same time increasing fuel capacity by 1,100 gals., providing range sufficient to fish to Westward, and the means for trimming the vessel for most efficient running."

45,000 hours deep-water dragging before first engine overhaul...using RPM DELO Oil

The 56 foot dragger Noyo Star operates out of Ft. Bragg, California. Built in 1944, she received her first engine overhaul in 1957 . . . 13 years after launching! The Noyo Star uses RPM DELO Oil exclusively.

"I wouldn't use any other oil," says Owner and Captain Manuel Figueredo. "We ran 45,000 hours before the first overhaul! There were no stuck rings. There wasn't any corrosion . . . the engine is still in beautiful shape. We fish hard, every day, dragging in depths up to 350 fathoms, but "RPM DELO" keeps our diesel in perfect condition."

Shipnotes: 150 horsepower Murphy diesel powers the M.V. Noyo Star. Engine required only one overhaul in last fifteen years. Top speed is nine knots—fishes for sole, rock and ling cod. Navigation and fishing aids include a Fathometer, radio and Loran.

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CATCH: 1,700,000 lbs. of Blue Fin — within 2 months!

REMARKS
STARR NYLON NETTING praised by Skipper

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all the way!

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"850 tons with *only one-third* of our 325 fathom long seine in 1959 made up of Starr Nylon Netting. Without Starr we wouldn't have gotten half . . .

"Other webbing continually tore . . . and we were ashore as many as four days repairing it. But no trouble with the piece of STARR webbing — not even when we caught a whopping 260,000 pounds of tuna in one set . . .

"Next year we are going *all the way* with our entire tuna seine being made up by STARR."

Another in a new series of Starr advertisements direct from the fishermen using Starr Nylon Netting.

STARR NETS

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SHERIE—First to run of the Rawson-built plastic and fiberglass Bristol Bay gillnetters. Note her excellent trim and the easy exit, although obviously she is running under wraps.

Five Plastic Gillnetters Pioneer on Bristol Bay

●Plastic gillnetters will play a part on Bristol Bay this season — a part which may go on and grow with the vigor which plastic-and-fiberglass construction has grown in other marine fields.

Three of the four or five craft building for the Bay went north early in May aboard American Packing Company's cannery *Ampac*, and will fish for that firm.

The plastic boats—six all told, including one for Lynn Canal—are the product of Ron Rawson, Inc., operating in the plant of Maritime Shipyards, Seattle. They are identical craft, built from designs by Edwin Monk, Seattle naval architect. They are 31' 9" in officially measured length by 10'6" beam, with official gross tonnage 4.83.

Hull form is relatively flat-bottomed, with scant deadrise, which should combine with the full stern to give the rising action of a semi-displacement hull when running light. The stern, with no tunnel, gives a clean, power-conserving exit. The bow has unusual flare for a gillnetter, making for a dry boat, with extra working space forward.

Beside the three Rawson boats for American Pack, one is being built for Alaska Packers Association, one for a Peninsula packer and one for Haines Packing Co.—this latter being a reel job with a diesel engine. The others are all powered with 175-hp. Chrysler Sea Vs. One of the Ampac boats will be equipped with a Raytheon "Angler" Fathometer.

The power roller boats are all fitted with Marco hydraulic jobs. All boats have Mathers controls, Crowell hydraulic steering systems and Walters keel coolers. Plastic construction makes it possible to recess the coolers into the hull for protection from damage. Similarly, the skeg iron is fitted *into* rather than onto the keel, in a molded recess. Shafting is Tempaloy, and the stern bearing Goodrich rubber with external mount, making changing the bearing a very simple matter, even under Bristol Bay operating conditions.

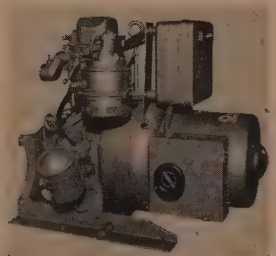
Hull thickness ranges from ⅜" to 1", being greatest of course at points of stress or where stiffness is required. There are only two parts in the boat's structure—the hull unit; and the deck and house unit. The weather canopy is a minor exception. It is fastened to the house in order to permit it to be removed and stowed in the hull to save cubic tonnage if it is necessary to ship the boats by freighter.

The Rawson boats require no painting, colors being built into the vessels in the outer lamination of plastic over glass fiber cloth. One of the Rawson craft is being painted with anti-fouling bottom coat as an experiment to be contrasted with the other plain plastic bottoms in service.

Decks receive an anti-skid treatment. An interesting innovation is a hawse hole in the bow rail on the centerline to permit bow drifting.

Wood is at a minimum in the Rawson craft. The rubbing rail, grab rail, pen boards between the net cockpit and the fish lockers, floor boards and hatch above the main hold, cabin after bulkhead, removal tow bitt — that's about it.

Mr. Rawson brings to his building long experience with plastics and fiberglass. Formerly a research and development chemist with Reichhold Chemicals, Inc., he turned to sales with Marine Fiberglass & Plastics, Seattle, and subsequently went into the building of boats from these materials. His firm's sailing yachts have won wide popularity on the Pacific Coast, achieving a success from which he moved to pioneer plastic construction for boats subjected to some of the most arduous duties ever required of a hull—gillnetting on Bristol Bay.



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A MATTER OF FACT ABOUT ACRONIZE

To prevent misunderstanding about the position of Acronize® chlortetracycline under the new food additive regulations, the following is an open letter to the poultry and fishing industries.

CYANAMID

AMERICAN CYANAMID COMPANY
AGRICULTURAL DIVISION
30 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.

Dear Sir:

In response to inquiries which we have received concerning the status of Acronize chlortetracycline, we feel that the following information will be of interest to you.

Section 408 (the Miller Amendment) of the Food, Drug and Cosmetic Act deals with the use of chemicals on raw agricultural products and when so used Acronize chlortetracycline comes under that Section. In order to obtain clearance under this Amendment a chemical receives a certificate of usefulness from the Secretary of Agriculture that the product will have the utility claimed for it. The Department of Agriculture must also give an opinion to the Food and Drug Administration as to whether the proposed tolerance or exemption reasonably reflects the amount of residue likely to remain when used in the proposed manner. The Food and Drug Administration must clear the chemical from the standpoint of safety for the proposed uses. Acronize was cleared for use on poultry on November 30, 1955 under the procedures as stated above.

On April 21, 1959 a second clearance for Acronize was granted by the Food and Drug Administration under the Miller Amendment for its use on whole, headed or gutted fish, unpeeled shrimp and shucked scallops. The same procedures were required for this clearance.

CYANAMID

- 2 -

For a number of years American Cyanamid Company has been cooperating with the Food and Drug Administration, the Department of Agriculture and the Department of Interior in order to establish the utility and safety of Acronize when applied to raw agricultural commodities and foods. Extensive animal toxicity studies and extensive clinical studies on humans show that the product is completely safe for approved uses. There has probably been no food additive which has undergone such rigorous testing.

Currently we have a petition pending with the Food and Drug Administration under the new Food Additive Amendment (Section 409) of the Food, Drug and Cosmetic Act which relates primarily to processed foods. Our petition deals with the application of Acronize chlortetracycline on processed fish such as fillets, fish steaks and peeled shrimp. A part of this petition includes the results of continuous feeding of Acronize chlortetracycline to rats for a two-year period and dogs for a one-year period at levels considerably higher than would ever be found in foods. Since we feel that these studies show conclusively that Acronize chlortetracycline is safe for such uses, we hope to have the necessary approval before long.

We trust this information will reassure you that you are using a safe product when you place Acronize chlortetracycline on poultry or other commodities for which its use has been approved, and within the approved limits. If you have any further questions, please do not hesitate to let us know.

FOOD INDUSTRY DEPARTMENT

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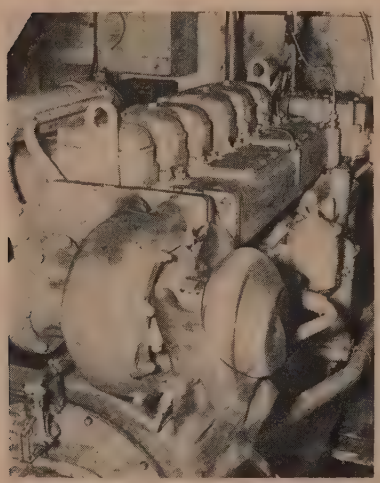
CYANAMID
ACRONIZE

Evening Star, easing through Seattle's Lake Washington Canal en route to salt water for trials of her new Allis-Chalmers diesel.



Turbo-charger end of **Evening Star's** Allis-Chalmers diesel, showing the remarkable compactness for its 230 hp.

"Evening Star" Sparkles With New Power Plant

Evening Star, owned by Fred Petersen and Norris Lee, headed westward on the early 1960 halibut season with a new power plant, an Allis-Chalmers Model 21000 turbo charged Diesel.

On the run from Poulsbo, Wash., *Evening Star's* home port to Ketchikan, two things stood out. (1) Skipper Petersen reported that the vessel gained five hours over previous running times over the route and also that (2) the new engine showed great fuel economy. Sixty,four hours of continuous running on only 630 gallons of fuel made both owners pleased with the performance of the new engine.

Rated at 230 continuous horsepower the A-C Diesel turns a 56x40 wheel through Capitol Model HYC-EC 7700 4½ to 1 reduction gear.

Careful checks on performance were made by Leo Weberg of Pacific Fishing & Trading Company who installed the engine, during the trip North. Weberg made the trip on the *Evening Star* and *Northern* from Seattle to Ketchikan in middle March prior to the opening of the Early Bering Sea halibut season.

On his return from Alaska Weberg reported that Petersen and Lee were most pleased with the performance and economy of the new plant.

Fred Petersen, left, skipper, and **Norris Lee,** engineer, co-owners of the **Evening Star.**

Peterson Sells Four Steel Beach Seiners

George Peterson, president, Peterson Boat Building Co., Tacoma, recently announced sale of the four 35' steel-hulled purse seiners which were completed last year from hulls built by the Ace Furnace Co. Alaska Year-Round Canneries Co., Seldovia, purchased them through Tom Farrell, Seattle boat broker.

All four, named the *Maverick, Mistress, Mugwump* and *Moccasin,* were expected to reach Seldovia before May 1, for fishing in Prince William Sound. The *Maverick* fished in the San Juan Islands area last summer.

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New A-C Power for EVENING STAR Ups Fuel Economy

Two performance stand-outs impressed owners Fred Petersen and Norris Lee on the run from Poulsbo, Washington, the EVENING STAR'S home port to Ketchikan, Alaska, for the start of the 1960 halibut season:
(1) The vessel gained five hours over previous running times over the same route and (2) the new ALLIS-CHALMERS, Model 21000 turbo charged diesel, rated at 230 continuous horsepower, showed great fuel economy. Sixty-four hours of continuous running with a fuel consumption of only 630 gallons for the trip, far surpassed previous performances.

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On The Ship Canal — By The Ballard Bridge

San Vito, 78' sardine seiner converted into a drum-trawler for fishing out of Eureka, stands to sea with her new 400-hp. Cummins diesel providing a flexible flow of dependable power.

Repowered "Vega" Delivers Speed Bonus, Saves Fuel

Typical of the growing trend toward modern, high-speed diesel power in commercial fishing boats is the recently-completed repowering of the Alaskan troller *Vega.* Her owner, Glen Collins of Ketchikan, installed a 6-cylinder Barr marine diesel rated at 96 shaft h.p. at 2,250 r.p.m. turning a 38"x24½ wheel through a 4:1 Capitol hydraulic reverse-reduction gear.

The switch to the Barr diesel power increased the vessel's speed by about 7½%, an advantage not counted on by the owner. Cruising speed of the 42' by 12'4" *Vega* (21 gross tons, 16 net tons) is 10 m.p.h. Running free, the owner reports diesel fuel consumption of "less than 2 gallons per hour" with the Barr engine.

Collins anticipates cutting his annual fuel bills by more than 50% as a result of the changeover. He installed the engine himself, and revealed that one factor which influenced his selection of the Barr diesel was the case of changeover from the gasoline engine. The Barr Diesel has the same 22½" (athwartships) spacing between mounting centers as standard gasoline engines, which enabled him to use the old stringers with no modifications and the existing exhaust system.

Vega, Alaska salmon troller recently repowered with a 6-cylinder Barr marine diesel. Owner Glen Collins reports fuel consumption of "less than 2 gallons per hour running free—considerably less at trolling speed."

400-Hp. Ranks "San Vito" Among Powerful Trawlers

San Vito, originally a 78' sardine seiner, built by Western Boat Building Co., Tacoma, in 1939, is working in a new field this spring, actually out of Fields Landing, Calif:; and she's virtually a new boat, too, with a 400-hp. Cummins turbo-diesel which ranks her with the most powerful Pacific draggers.

Installation was carried out at Elfving's Yard, Coos Bay, Ore., and includes a Twin-Disc MG-521 marine gear with 4.087:1 reduction. *San Vito* also has a Twin-Disc front-end power take-off, from which is driven a 20 cfm. air compressor and the gear box which in turn powers her deck machinery and high capacity centrifugal pump.

Gilbert A. Hunter of Eureka Fisheries, Fields Landings, is the present owner of *San Vito,* which is commanded in her fishing for the Eureka company by Capt. George Saubert.

With a crew of three, he operates *San Vito* in the deep-dragging fishery out of Humboldt Bay, which puts a premium on power and diesel dependability. The vessel is equipped as a drum trawler, winding her entire net on a drum situated at the extreme stern. This obviates the necessity of fleeting the net or hand-hauling, and permits faster fishing.

In semi-mechanized trawl fishing of this kind there's a for plenty of power, and power which is flexible as well as abundant. That the turbo-charged Cummins with to 4.087:1 Twin-Disc reduction gear provides in full measure.

B. C. Vessel Owners Re-Elect G. A. Bracjich

George A. Bracjich, owner of the salmon seiner *Miss Georgina,* recently was re-elected for a third term as president of the Fishing Vessel Owners Association of British Columbia. Frank Dujmanich, owner of *Gregory D,* was returned as vice president.

Here are the new directors, chosen at the annual meeting in Vancouver, B. C.: Halibut—Emil Jensen, owner of *Blue Pacific No. 1*; Salmon—Clen Martinolich, owner of *Mar Lady;* Herring—Kurt Larson, owner of *Western Girl;* Trawl — Hank McBride, owner of *Gail Bernice;* Tender — Michael O'Brien, owner of *Linda;* Membership —Fred Kohse; Publicity—Jack McMillan, *B. C. Producer;* Government —Charles Clarke, owner of *Western Producer.*

Harold A. Christenson is secretary-manager.

Martinac-built Cape Beverly is one of the latest clipper-to-seiner conversions involved in the revolutionary trend sweeping the California tuna fleet.

"Cape Beverly" Switches From Live Bait to Seine

● *Cape Beverly*, first of the tuna clippers to be converted to a seiner by a Northern shipyard, came down to Southern California last month to pick up her new net and make her test sets.

Built by J. M. Martinac Shipbuilding Corporation of Tacoma, the *Cape Beverly* was converted by the same yard and is still owned by J. M. Martinac. She is 113′ long, with a 26′ beam.

Her Gold Eagle brand net, made by U.S. Net & Twine Co. in its new Long Beach, Calif., factory is 432 fathoms by 40 fathoms deep, made up of 4¼-in. 42 and 8-in. 54 webbing, all nylon. This is a big net for a vessel the size of the *Cape Beverly*. It will be handled with the aid of a Northern Dragger winch made by Tacoma Boat Building Co., and a Puretic power block. The winch is a standard installation, with the usual two drums in a single deck unit.

Besides her net, the *Cape Beverly* procured her skiff in the Los Angeles Harbor area too. Made by Mardesich Cabinet and Boat Works of San Pedro, the skiff is 28′ by 15′, and carries a GM 471 95-hp diesel engine.

The new seiner is co-captained by Pete Laponovich of San Pedro, who will act as fish boss, and Tony Martinovich, who will have the chief responsibility for navigation. John Cvitanich is chief engineer.

Cape Beverly's main propulsion engine is a Superior 620-hp. six-cylinder diesel, with two 153-hp. Caterpillars for auxiliary power.

The new seiner has ample refrigerated hold space, with 10 fish wells in her hull, refrigerated by an all-brine system. Her compressors are three Worthingtons, plus one smaller unit for the boat's own needs.

In the pilot house, *Cape Beverly* is provided with all necessary navigational and safety aids. She has a Sperry automatic pilot, a Fathometer, a radar supplied by Ranger Electric Service Co. of Seattle, a 450-watt radio sending set and a receiving set, and an Apelco direction finder.

She also has a University loudspeaker inter-com system, with stations in the pilot house, on the after deck, in the crow's nest, and one spare station.

Cape Beverly will operate out of Long Beach and Seattle.

Cape Beverly's Staff—On the left and center are the big converted seiner's co-captains: Pete Laponovich, left, fishing master; Tony Martinovich, center, navigating skipper; right John Cvitanich, chief engineer.

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New 48' x 14' Monk Troller or Ocean cruiser, 2" Mahogany hull, 2" x 3" oak frames 10" centers, GM Diesel 225 HP, 3-1 reduction, 1500 fuel, Buda diesel 10 kw Generator, ready for custom finishing inside. Price located Los Angeles, $19,800. For photos and information contact: Art Walker, 2731 W. Coast Highway, Newport Beach, Calif. Ph. Mid. 6-5677.

For Sale—38-foot Troller "Ella June II". Double ender, registered 8-ton capacity. 6 cylinder Cummins diesel. Radio telephone, Fathometer, Freeman Pilot and Loran. Price $9,000.00. Phone FA 5-4168. Howard Eskola, 242 Columbia, Astoria, Oregon.

OLENE—45' x 12' refrig. Northern Troller, built 1949, GM 6-71, 1200 gals. diesel, radio, DF, pilot, sounder, loran, gurdies, top condition . . . $23,500. Many other salmon and albacore trollers, draggers and seiners. WOODWARD BROKERAGE, Moss Landing, Calif. NEwton 3-2620.

For Sale — 3/8 Galv. triple B Chain — 245 foot lengths—.26 per pound; 1 New Surplus 671 Block —$275.00; G. E. 25 watt, 12 volt frosted lamps—.20 per lamp, by the case—120 lamps per case; Jap Feathered jigs, 1½ ounce, .25 each, 2 ounce, .30 each. California Commercial Fisherman's Association, 745 South Seaside Ave., Terminal Island, Calif. Phone TE 3-4509.

82' x 23' Northern Blt. Seiner, 100 Ton refrig. Hold, 500 G.M.C. Dsl. $32,500.00. FRANK SIMON ASSOCIATES, P. O. Box 832, Wilmington, California, Phone TE 5-3101. Fish and Work Boats of all Kinds.

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Gudemansen Wins AFU Post at Kechikan

Harold Gudemansen of Ketchikan was elected Alaska Fishermen's Union port agent there at the annual voting concluded early in April. He had a margin of 14 votes over Oscar Eriksen, who had held the position for 14 years. This was the only change in officers for 1960.

Thus George Johansen was chosen secretary-treasurer of the union for the tenth time, while Swan Lundmark, his assistant, was re-elected for a ninth term.

Re-elected port agents include Abe Lehto at San Francisco; Swan Ohman, Astoria-Portland; and Jack Wood, Bellingham.

Policy committee members chosen are: Norman Asbjornsen, Henry Gruntman, Fred Hegre, Seattle; Eino Moilanen, Astoria - Portland; Oscar Rodin, Bellingham; William Lehto, San Francisco. The latter, with Mr. Johansen, were elected to the pension committee, and the secretary-treasurer was designated delegate to the AFL-CIO.

Five Aluminum Skiffs Built by Chaffee

Five 28' all-aluminum purse seine skiffs have been under construction by Chaffee Machine Co. at San Diego, using welded plate and sheet sections of aluminum alloy 5086 by Kaiser Aluminum. The skiffs will be diesel powered and equipped with winches for net handling.

Jitney Seiners Launched

The Kodiak Island "jitney" seiner fleet is augmented this spring by three modern craft launched late in April from the Sagstad Marina, Seattle. All will fish for San Juan Fishing & Packing Co.

The boars are: *Solveig,* built for Johannes Nygaard; *Rebel,* for Roy Dettinger; and *Linda Lee* for Hans Nelson.

The Lions Look Down from the ridge above the bow of another great Canadian fishing craft, the 77½′ steel **Camaano Sound,** combination seiner and longliner which upholds today's great tradition of capability in Canadian fishing craft.

"Caamano Sound" Holds To High B.C. Standard

One of the newest seiner-longliners operating out of British Columbia ports this season is *Caamano Sound,* first steel fishing vessel to be built at the Queensborough yard of Star Shipyards (Mercer) Ltd., and powered by a 335 hp. Waukesha "Defender" model diesel engine.

The Robert Allans, naval architects, designed the ship and Captain Charlie Clarke supervised construction in behalf of Nelson Bros. Fisheries, which will manage its operation, with Bill Wachsmuth as skipper.

Tommy Nakamoto, who used to operate Union Boat Works in Vancouver before the war and now owns a sawmill at Chase, B. C., financed construction of *Caamano Sound* as an investment for his son Arthur who, however, is not a fisherman and will take no part in the vessel's operation.

Caamano Sound's length is 77′5″, beam 21′6″. Steel construction was conventional, double chine with 5/16″ plating on transverse frames. Double-plate V-shaped skeg was designed by the Allans to give greater strength.

Fishermen Sue for Damages by Piledriver

Owners of six fishing vessels at South Bend, Wash., have asked judgment of $12,000 in court there for alleged damages to their boats when the Kirkman & Strand pile driving barge broke loose from the Tokeland wharf during a 1958 November storm.

Owners, boats and their claimed damages were reported to be:

Percy Aaron, *Neptune,* $5,000; Kenneth Hawkins, *Patricia Mae,* $3,000; Charles Robinson, craft numbered *30C451,* $3,000; I. E. Hermann, *Butch,* $450; Leroy Beck, *Mino,* $200; plus a boat owned by George Magill.

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Looking at it the Same Way—Lorne Ford, left, Canadian Fishing Co., Wayne Tretsven and Lynn McKee, U.S. B.C.F., intent on a technological topic during the meeting at Gearhart.

Aluminum-End Cans For Tuna to Appear Shortly

● Three-piece three-seam tuna cans with tinplate body and aluminum ends will be introduced within a short time on a commercial basis, Pacific Fisheries Technologists were told at their Gearhart, Ore., meeting in March by R. G. Landgraf of the Continental Can Co., Chicago.

This is the application of aluminum to the rigid food container field which the company expects to have the greatest immediate application, and it is significant that tuna canning seems to be the first food field where notable application can be anticipated. Mr. Landgraf made it plain that research in other types of aluminum cans—drawing, with "ironing"; and extrusion with "reverse impact"—continue constantly under study.

Aluminum - end salmon cans have certain problems with Mr. Landgraf did not specify, but which he expects to see solved shortly.

● In the case of the three-piece can with tinplate body and aluminum ends the principal technological problem involves the electro-chemical corrosion possibilities resulting from the coupling of two dissimilar metals in a solution. This requires particularly effective enamel very thoroughly applied, and some revision of processing procedure.

However, in the case of tuna canning the problems seems to have been solved; while the advantages are believed to provide adequate incentive for introduction of the new package. These advantages, as specifically listed by Mr. Landgraf, include: (1) comparable cost; (2) the esthetic appeal of better internal appearance of the can; (3) no sulphide deposition in the headspace or staining of the interior can ends; (4) no external rusting of the ends.

● Rapid progress toward solution of the problems of producing cans of aluminum plate gives Mr. Landgraf high confidence that ultimately they will find a large place in food packing. Eventual competitive cost in certain sizes and for a number of specific applications is confidently anticipated.

Technical problems associated with the development of aluminum rigid food containers include: (1) fabrication methods and strength of the aluminum alloys; (2) special lubricants required in fabrication, and their removal from the finished container; (3) inactivation of magnetic controls in manufacture and packing; (4) surface characteristics, requiring new enamels; (5) necessity for careful handling, perhaps with the necessity for cooler trays instead of retort baskets in fish canneries, and perhaps the need for specially designed cases for the finished product.

"These are the problems; but they will be overcome," said Mr. Landgraf. He is equally hopeful that, with the development of large volume demand for aluminum food containers the price will come down to levels competitive with tin-plate.

He was speaking of rigid containers for heat-sterilized foods only. In the case of foil, for fresh or frozen foods, the day of aluminum has already arrived, with 100,000 tons used for food packaging in 1959.

P.A.F. Profits Rise; 4 Directors to Shift

In spite of one of the lowest Alaska salmon packs ever recorded, in 1959 Pacific American Fisheries, Inc., made net earnings of $935,053, or $2.48 per share; in contrast with $123,116, or 33¢ per share, in the previous fiscal year.

Volume of business in the two years was almost the same, $15,349,816 in the year ending Feb. 29, 1960.

The annual report took note of the fact that in 1959 the company had benefitted tax-wise from carry-forward of previous loss credits; that its King crab canning business had advanced sharply; and that its frozen food operations had been unprofitable.

Because of the transitional character of the company's activities at the present time, directors decided not to pay a dividend.

Further shifts in personnel of the P.A.F. board of directors are forecast at the time of the annual meeting May 26. Philip D. Macbride, who has been chairman of the board for 21 years, will retire; and it is anticipated that Nat S. Rogers will succeed him in that position. Other present directors who will retire from the board are Thomas F. Gleed, Evan S. McCord, and Volney Richmond Jr.

Nominated to be new members of the board are: Harold W. Cameron, James B. Douglas, R. A. Moen, and Irvine B. Rabel.

New Calif. Firm Sells "Carnation" Sea Foods

Formation of the Seafare Western Corporation to market "Carnation" brand seafood products exclusively in the 13 western states, including Alaska and Hawaii, is announced by Joseph Merlo, general manager of the new firm with headquarters in the penthouse suite at 1810 Fair Oaks, Pasadena, Calif.

Mr. Merlo will direct all activities in connection with the production and marketing of frozen Carnation Brand Seafood products in the western portion of the United States.

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Buy them from your favorite Marine Supply House or Ship Repair Yard when you haul out. Large west coast stocks, popular sizes. Factory stock to 11¾-inch shaft size available overnight by air.

The 112-foot "West Point" loads her seine at sea following her recent conversion from a tuna clipper to a tuna seiner. Her 6½-inch Monel tailshaft is protected with Goodrich Cutless Bearings.

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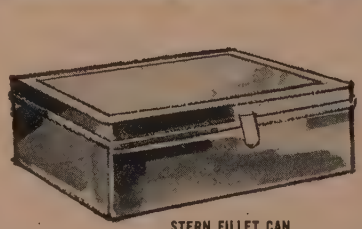

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WOJCIK & SWISS SHOW
Some New Wrinkles in Crab Packing

● Wojcik & Swiss, Inc., Eureka, Calif., agents for Halibut Producers Co-op (HPC), and Meredith Fish Co., have one of the most modern crab and shrimp processing plants on the Coast.

About 8,000-lbs. of crab meat can be packed daily, and to accomplish this production the plant is just about as automated as is possible. The man responsible for the streamlined operation is Frank Lucido, vice-president and general manager, who has spent his entire life in the California fish industry and for many years was manager of the Bodega Bay plant of the Meredith Fish Co.

Crabs are unloaded via electric hoist, and weighed on the dock. From the scales they are dumped into a steel tilting hopper, which when full is hydraulically tilted, sending the crabs into a holding chute.

The motor driven brush backers are at the end of the chute, and two men butcher the crabs and throw them into a stainless steel cooking basket, which has a capacity of 350-lbs. per cook.

Cooking time varies according to conditions, but it is regulated by an electric timer. When the timer sounds off the cooking basket is hydraulically raised and the crabs are dumped into a cooling tank, chilled with blocks of ice, which helps release the meat from the shell.

A hydraulically operated tilting device raises the crabs out of the chill tank to an apron, from which they are raked into boxes with a capacity of 40-lbs. Each box is weighed carefully, put on a pallet, loaded on to a lift truck and rolled into the picking room.

When the plant is working at full capacity there are 87 pickers. The girls pick into round, stainless steel pans, perforated at the bottom. The body meat and leg meat are kept and weighed separately. Each girl as she fills one of the pans puts a plastic tag with her number on top of the crab meat. At the scales the girl is credited with picking so much leg meat and so much body meat. Thus the firm knows exactly how much recovery each girl gets from 40-lbs. of crab.

From the scales the crab meat is taken to two separate briners — one for crab legs and the other for body meat. The brine is a solution of between 85-90%. The meat is pushed through the briner by water pressure, and then caught in stainless steel lined trays, and put in large fresh water tanks.

After freshening, the trays are drained and the crab meat goes again to picking tables where girls pick out

Top Men at Top—Karl Engberg, president, left, and Frank Lucido, vice president and sales manager, Wojcik & Swiss, Eureka, Calif.
Butchering and Cooking are shown in the middle photo, with the backed crabs going into the cooking basket behind the man in the white uniform. **Cooked Crabs** from the cooling tank are put into 40-lb. boxes from which the pickers draw a known volume of material.

Eighty-seven women can work at once picking crabs in this clean, efficient picking room at Wojcik & Swiss, shown in the upper photo.
Vacuum Packing of five-pound cans of picked crab meat with a specific proportion of grades is shown in middle picture. Women in left background are weighing the body and leg meat into the cans.
Rubber Bands hold the legs of whole cooked crabs during the brine freezing process, thus preventing damage and retaining compactness for plastic packaging.

any remaining shells.

The packing table is equipped with a moving white food belt, and the cleaned body meat is taken to the end of the table where it falls into two stainless steel pans. Here girls put the specified amount of body meat into 5-lb. American Can Co. cans. The cans are then passed on to a second packing table where a specified amount of broken legs are put in. Finally, the cans are topped with fry legs and claws.

The cans are closed on an American Can Co. vacuum closing machine and taken to the freezer.

Wojcik & Swiss, Inc., also have a whole crab and eviscerated crab freezing operation. Crabs for the whole crab pack are cooked and after cooking the legs are secured with rubber bands to prevent breakage. After weighing and grading, they are packed in wire baskets, put in a rack and frozen in brine.

After freezing each crab is packed in a polyethylene bag manufactured by Cello Bag Co., then packed in Fibreboard Paper Products Corp. shipping cartons, as are the vacuum packed 5-lb. tins.

The eviscerated frozen crabs are wrapped in waxed freezer paper before freezing to keep them from drying out. This is removed before packing in the plastic bag.

Crab meat, whole and eviscerated crab are all packed under the "Hy-Wave" brand for Fishermen's Federation, Inc., Halibut Producers Co-op, Seattle.

Wojcik & Swiss, Inc., was founded several years ago by Julian Wojcik and Alfred Swiss. It was later incorporated with a number of fishermen owning shares. Karl Engberg is now president. Mrs. Frank Lucido is office manager, and assistant to Frank.

Pacific Shrimpers Plug For Control of Imports

● Pacific shrimp producers placed themselves on record before the U.S. Tariff Commission as squarely in favor of restrictive measures designed to control the continuing increase of imported shrimp.

The action was taken at a Seattle meeting of the West Coast Shrimp Producers Association. This was attended by:

Earl Bendiksen, W. E. Bendiksen Co., South Bend, Wash.; Les Waring, Crown Seafoods Sales Co., Hoquiam, Wash.; Steve Sarich, Harbor Seafoods Co., Bay Center, Wash.; Mark Jensen and Chris Paulson, Island Seafoods, Inc., Kodiak, Alaska; A. Marchand, Seaside Clam Co., Seaside, Ore.; Ivar Wendt, Sutterlin & Wendt, Inc., Seldovia, Alaska; Walter Johnson, Halibut Producers Cooperative; D. W. Close, Alaska Marine Foods, Inc.; F. V. Brown Jr., Seward Seafoods, Inc., all of Seward, Alaska.

● Position of the Pacific shrimp packers was laid before the Tariff Commission in a letter making these points:

(1) The Northwest and Alaska shrimp industry is capable of supplying the entire United States' needs on Tiny Shrimp, and ample production is available.

(2) The Northwest and Alaska shrimp industry in 1959 packed 400,000 cases of 24/4½ oz. canned shrimp, which is approximately 50% of the present canning capacity.

(3) The Northern Alaska shrimp canneries are all new installations activated during the last two years.

(4) Pacific shrimp resources are very substantial and that this shrimp industry is hard pressed for market outlets.

(5) The Northwest and Alaska are in need of this new shrimp industry to bring employment to fishing vessels and plant labor.

(6) The minimum hourly wages paid by this industry in Washington is $1.55 for women, $1.85 for men. In Alaska $2.25 for women, $2.65 for men.

Jas. Sinclair Assumes 2nd Industrial Presidency

James Sinclair, who has been president of the Fisheries Association of British Columbia for the past two years, has been named president and managing director of Deeks-McBride and affiliated companies, Vancouver, primarily concerned with the cement business.

While his new duties will probably occupy a good deal of Mr. Sinclair's time, he is continuing in the presidency of the Fisheries Association, where his wide knowledge of the industry will be at the organization's disposal.

Before assuming his post with the Fisheries Association, following the federal election in which his party was defeated by the Diefenbaker Conservatives, Mr. Sinclair was for several years an outstanding minister of fisheries, and it was during that period that he became devoted to that field. The association post offered him an opportunity to continue his devotion to the development of the Pacific coast's fisheries.

His new duties with Deeks-McBride have provided another challenge in the field of corporation administration with one of the largest companies in the cement industry. Deeks-McBride is affiliated with the world-wide Lafarge organization.

Mr. Sinclair was named a member of the B. C. Energy Board and B. C. Research Council during the past year.

Santa Cruz Fish Firm Moves to Moss Landing

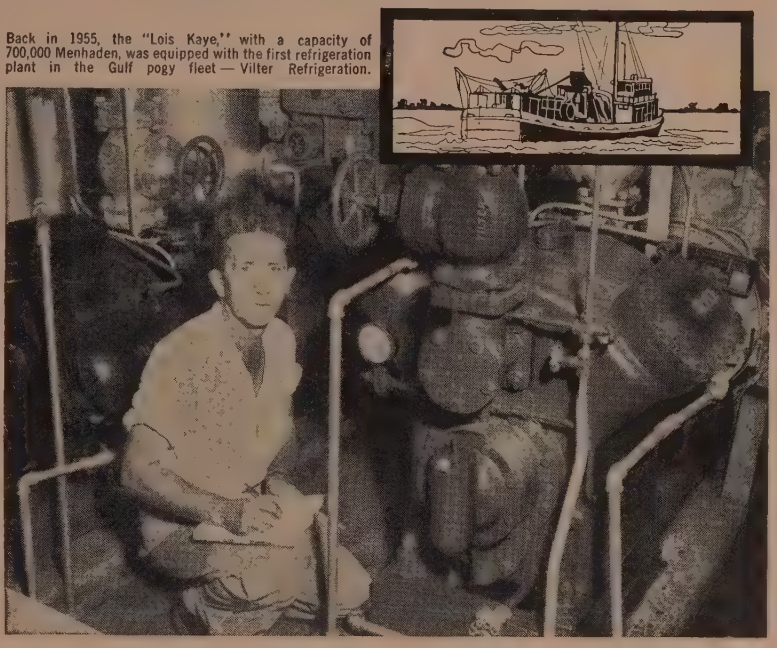
General Fish Corporation, Santa Cruz, Calif., has moved from the location it has occupied at the end of the Municipal Wharf for the past 14 years, to the plant formerly occupied by Western Fish Products Co., a Hovden Food Products Corporation subsidiary, at Moss Landing, Calif.

John Loero continues as manager, with Tom Flanagan, office manager. General Fish has installed a complete new sharp freezing and cold storage plant, with a freezing capacity of 20,000-lbs. per seven hours, and a holding capacity of a million pounds. Refrigeration is provided by two Cyclops 6½x6½ ice machines.

A complete new modern fillet line 60' long, with 24" wide conveyor belts is being installed. Fillets will be packed in 2, 5, and 10-lb. cartons.

The company has a 250' dock in Moss Landing Harbor, equipped with three electric hoists. The firm will handle bottom fish, salmon, Albacore, herring, squid, white bait, mackerel, and sardines for bait.

From fishing grounds to dock, Menhaden stay firm and fresh with Vilter Refrigeration



Back in 1955, the "Lois Kaye," with a capacity of 700,000 Menhaden, was equipped with the first refrigeration plant in the Gulf pogy fleet — Vilter Refrigeration.

"The 'Lois Kaye' has been in service five years as a refrigerated Menhaden boat. And during those five years her Vilter VMC compressors have been working 24 hours a day on the fishing grounds," according to Dewey Bowen. "They have given excellent service. Very little maintenance has been required—as a matter of fact, we have replaced the rings only once in the whole five years!"

"Heart of the 'chilled brine' system aboard the 'Lois Kaye' is a pair of 95-ton Vilter VMC compressors," says Chief Engineer Dewey Bowen. "These units cool the seawater which is first pumped into the storage tanks when the boat arrives at the fishing grounds. Later, when the fish are pumped from seine to tank, the chilled brine is recirculated. By the time the Menhaden are brought to the processing dock they are being held at a constant temperature of approximately 37° F. This means, of course, that the fish are still firm and fresh. The refrigeration prevents loss in volume due to decomposition, makes processing much simpler, and yields a better quality meal and oil.

"Although this was the first refrigerated Menhaden boat in the Gulf, she is still considered the best," Chief Engineer Bowen concluded, "and her VILTER Compressors have been helping her to bring in fish of top quality for the past 5 years."

Why don't you consult with Vilter for your refrigeration needs on shore and aboard?

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Write for Bulletin 817 to The Vilter Manufacturing Company, Dept. PF-911 2217 South First Street Milwaukee 7, Wisconsin

Venture Trawler's Design Beginning to Take Shape

● Design proposals for a North Pacific and Bering Sea exploratory fishing vessel were submitted in April by Philip F. Spaulding, Seattle naval architect, to a committee of businessmen interested in this need (see page 37, April *Pacific Fisherman*). The group plans to continue its study of the problem, which it feels is of increasing urgency in the light of developments in the Geneva conference on the Law of the Sea.

Specific design proposal will be completed this month, and the characteristics of the vessel will include:

1. Stern-trawl hull design similar to the Russian *Pushkin* and British *Fairtry III*.

2. Enclosed areas for working fishing gear.

3. Complete equipment for filleting, freezing and packaging aboard ship, to make the catch ready for the consumer.

4. A ship 225 to 250′ long and 50′ beam, to allow space below the main deck for the complete processing. Storage of cargo *above* this deck, with compensating ballast arrangement, will make the beamy ship somewhat similar to an ocean ferry in hull design concept.

5. Provision for cargo storage up in that main deck, in refrigerated van containers, ready for shipment from dock or transfer vessels.

6. About 2000 hp. diesel-electric propulsion, to allow transfer of electrical power from the same primary source for processing machinery, plus the full range of electronic gear when navigating under full power.

7. Complete automation, with portable processing lines to permit rapid changeover of multiple units from one type of fishing operation to another.

8. Laboratory space for an oceanographer, full-time, plus lab space for a full-time fisheries research staff, making scientific data immediately available during the fishing operation.

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You'll warm to industrial refrigeration economically designed and manufactured by Kohlenberger. Here's *complete* service covering every aspect of your refrigeration needs...from equipment manufacture and system design to plant layout and field erection. Since 1922 Kohlenberger Engineering Corporation has built its reputation on the skill of its engineers . . . the dependability of its equipment. We'd like to show you how you'll benefit. Write for literature or phone LAmbert 5-3521.

1. KMV Compressor: 20-200 HP. Heavy duty, high speed industrial refrigeration compressor units for ammonia and freon refrigerants.

2. KE Condenser: Heavy duty industrial evaporative condenser. 10-200 tons.

3. Krakice Maker: 10-60 ton ice capacity per unit. For every crushed ice requirement.

4. Unit Cooler: Industrial floor-type unit cooler for ammonia, freon and brine refrigerants. 5-30 tons.

Franchises available for qualified industrial refrigeration contractors. Contact C. R. Kohlenberger, president.

KOHLENBERGER ENGINEERING CORPORATION

1600 COMMONWEALTH AVE., P.O. BOX 432, FULLERTON, CALIFORNIA

Outboard Firm Sponsors Fishing Boat Conference

Fisheries experts from several countries will discuss the importance of mechanized fishing fleets and the various methods of achieving this mechanization in the first International Economic Conference on Small Craft for Fisheries and Transportation, to be held on May 24 at The Waldorf-Astoria hotel, New York.

The conference, sponsored by Outboard Marine Corporation and Outboard Marine International S. A., will make available to all governments the results of research and experience by governments, industry and international organizations in small craft propulsion. During the past 10 years the mechanization of small craft has resulted in the wide improvement of the economy and transportation of many nations.

Among the guests and speakers at the symposium will be officials of many countries, the United Nations and its special affiliated organizations and representatives of U. S. Government departments. Spokesmen for governments which have benefited from small craft mechanization will discuss their programs and the degree to which their economy and food supply have been improved through these practices.

Otter Trawlers Vote To Be AFU Branch

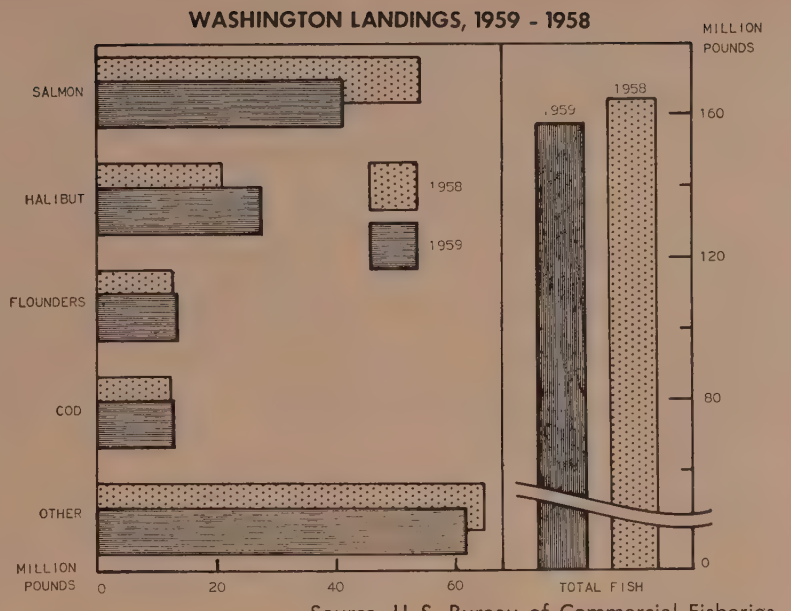
Seattle otter trawl fishermen voted in April to accept full-fledged branch status in the Alaska Fishermen's Union. The voting favored the action by 11 to 1, according to Vic Strathe, trawler agent.

1960 Skeena Fishing Stricture Is Relaxed

While recognizing the need for careful conservation of the Sockeye salmon stocks of the Skeena river fishery to combat the serious effects of the Babine slide, the management committee composed of A. J. Whitmore, director of the Pacific area, Department of Fisheries, and Dr. A. H. Needler, director of the Pacific Biological Station, has modified its original proposals for regulation during the 1960 season.

More fishing than had previously been indicated is expected to be permitted. The opening date for Sockeye fishing is to be advanced from July 17 to July 10.

The Sockeye run on the Skeena is expected to be small this year, composed of 4-year-olds from the 1956 spawning and 5-year-olds from the 1955 spawning, the poorest on record for the Skeena and is expected to provide a return of less than 200,000 5 year-olds. The 1956 spawning was moderate in number and, in the Babine watershed, well distributed over the spawning grounds. It is expected that about 500,000 or slightly more Sockeye should return from this run as 4 year-olds this season.



—Source: U. S. Bureau of Commercial Fisheries.

Steelheaders Renew Drive For Sport Fish Status

Association of Northwest Steelheaders, a group of sportsmen, is reported renewing the long campaign to have this fish accorded sport fish status in Oregon. Often tried, and as often defeated, this action would be a severe blow to commercial fishermen of both Washington and Oregon fishing the Columbia River.

While the Steelhead is a game fish in Washington and may not be sold in that state, it constitutes a substantial portion of the commercial catch on the Columbia River, and Washington fishermen may sell their Steelhead catches legally in Oregon.

SYNTHETIC ROPE REPORT

From Bristol Bay to San Francisco Bay, professional crab and salmon fishermen report consistent success with Tubbs synthetic fiber ropes as specified in the following table:

CATCH	ROPE USE	SIZE (diam.)
CRAB	**Nylon** pot warp (Alaska King Crab)	special lay ⅜" thru ½"
	Polypropylene pot warp (Pacific Dungeness Crab)	special lay 5/16", ⅜"
SALMON	**Nylon** tow lines, purse lines, lifting pieces for purse seining	⅝" thru 1"
	Polypropylene	
	gill net cork lines	special lay 1½"
	purse seine cork lines	⅝" thru ¾"
	purse seine breast & ring lines	½" thru ⅝"
	purse seine tow lines	¾" thru 1"
	stabilizer & pole lines (Trollers)	⅜" thru 1"

CHIEF ADVANTAGES OF TUBBS SYNTHETICS

Nylon: maximum strength • easy handling and flaking • low moisture absorption • resists rot, mildew, abrasion • long service life • good working elasticity

Polypropylene: high tensile strength • lightweight—it floats • waterproof • resists mildew, mold, marine growth • smooth handling

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Five Years' Hard Work Put Into Troller

R. J. Kirkpatrick and R. A. Hartley, Stockton, Calif., did it the hard way. Both experienced fishermen, they built their own troller *Mary Beth* in five years on week ends, in a back yard in Stockton.

The Ed Monk designed troller, 43x12'4"x6', however, is a very smart looking ship. She was recently launched at Stephens Bros., Inc., Stockton, and she was receiving the finishing touches at Ladd's Stockton Marina, Buckley's Cove.

She is powered with a 136 hp. Hercules diesel engine, fitted with a 3½-1 Paragon reverse and reduction gear from Hall-Young Co., Fishermen's Wharf San Francisco. The engine swings a Pitchometer Wirkkila propeller on a Monel shaft.

In the pilot house will be a Kaar 100 watt radio telephone, and an Allen Bradford direction finder. She will carry a crew of three. In the galley is a Neptune range.

American Marine Triple C was used to paint the bottom of the *Mary Beth*, and Hi-Tex on the sides.

Sockeye Commission Builds Pitt River Hatchery

An experimental sockeye hatchery is now being constructed by the International Pacific Salmon Commission staff on Pitt River. The spawning grounds of the Sockeye in Pitt River are very unstable, with the result that the native population is unable to reproduce at a competitive rate with highly productive up-river races which migrate through the fishery at approximately the same time. As a result of poor spawning conditions, the Pitt River Sockeye runs have declined in nine of the last 10 years and the escapement is rapidly reaching an unimportant level.

The station will have a starting capacity of 4,000,000 fry and is expected to be in operation in time for the 1960 run. New principles of operation will be tried at the outset and others added when justified by current research. The eggs will be incubated in complete darkness to eliminate the known adverse effects of light. The fry will be allowed to migrate from the hatchery to Pitt Lake in accordance with their natural instincts rather than be subject to arbitrary plantings regardless of the stage of physiological development.

The Commission believes new propagation methods may keep the Pitt River run of Sockeye of sufficient size to utilize the tremendous rearing capacity of Pitt Lake, which is 18 miles long.

"Time-Out" Record Set By Tagged Albacore

A new record for "time-out" between tagging and recapture was set this spring at 3.3 years when an Albacore tagged and released off San Francisco by biologists of the Honolulu Biological Laboratory, U. S. Bureau of Commercial Fisheries, was recaptured by Japanese tuna longline fishermen about 1,000 miles southeast of Tokyo Bay, in the vicinity of Marcus Island. This fish was tagged off the Bureau's research vessel *Charles H. Gilbert* on November 15, 1956 and was recaptured by the longline vessel, *No.* 2 *Hayatori Maru* of Iwate Prefecture, Japan, on March 13, 1960, after a period of 3 years and 4 months. This is the longest period thus far observed between tagging and recapture.

This marked the 17th recovery of Albacore tagged by the Honolulu Biological Laboratory. Other recoveries in the past have also demonstrated considerable trans-Pacific movements extending from the U. S. West Coast to the vicinity of Tokyo Bay, indicating that there is probably a single population of this valuable tuna species in the North Pacific.

Soviet and Japan Fix 1960 King Crab Quota

A conservative quota for King crab canning in Asian waters was agreed upon by the Japanese and Soviet negotiators in the 1960 treaty meeting in Moscow this spring.

The Japanese quota is set at 260,000 cases, against 280,000 in 1959.

The Soviet quota was set at 390,000 cases for this year, against a 1959 quota of 420,000. (However, the Russian pack in 1959 fell 100,000 cases short of attaining the quota available.)

The Okhotsk Sea King crab fishing areas adjacent to the west coast of Kamchatka are again divided into alternate strips of open and closed waters. These closures apply before May 20 and after August 14. Between these two dates all waters are open, but this free-fishing period is 10 days shorter than it was in 1959.

Pacific Oystermen Favor Cooperative Sales Plan

Canvass of the membership of the Pacific Coast Oyster Growers Association, conducted by Charles R. Pollock, secretary, at direction of the trustees, showed strong majority opinion in favor of cooperative marketing of Pacific oysters, fresh or frozen or in shell.

Seventy members favored formation of a producers cooperative outside the present growers association, with only 12 opposed. Vote of 63 to 13 favored the cooperative marketing through a sales agency; and by a vote of 54 to 23 the majority favored the cooperative selling of all shell stock and bulk oysters produced by the membership.

Wilbur-Ellis Executives In Japan Advance

Hiroichi Horiuchi has been appointed executive director Wilbur-Ellis Co. (Japan) Ltd., taking the place of the late Hisashi Fujisawa.

At the same time Hideo Fujisawa, eldest son of Mr. Fujisawa, and formerly manager of the Tokyo office, was promoted to be managing director of the company, the position vacated by Mr. Horiuchi; and Toshio Suzuki manager of the marine and agricultural products department, and Kikuzo Sato, manager of the company's Osaka office were both made directors.

Killers Are Dressed Up Fit To Kill

Dennis Gayle and *Allen Cody*, whale killer boats owned by Hunter & Foland, and whaling for the Del Monte Fish Co., Pt. San Pablo, Richmond, Calif., were overhauled at the San Francisco yards of Anderson & Cristofani.

Nichiro President Dies; K. Kobayashi is Elevated

Shuji Tani, 64, president of Nichiro Gyogyo K.K., leading factor in the Japanese salmon canning industry, died at Tokyo late in March of cancer.

Although he had been president of the company only a comparatively short time, Mr. Tani had spent 46 years in the service of Nichiro.

K. Kobayashi , vice president, and a member of the International North Pacific Fisheries Commission, was elevated to the presidency.

Russell V. Mack, Firm Fisheries Advocate, Dies

Fisheries of the North Pacific lost a firm and faithful friend when Russell V. Mack, Washington national representative, died on the floor of Congress in April.

Resident of Hoquiam, in the closest possible touch with the fisheries of the Washington coast, Mr. Mack was an effective advocate of the industry and the men who compose it.

Halibut Producers Co-Op Annual Election Results

Annual election of the Halibut Producers Cooperative resulted in selection of officers and trustees as follows:

President, Roger Bailey, *Karolee;* first vice president, Art Theberge, *Deep Sea;* second vice president, John Nevill, *Ethela;* secretary, Al Schramen, *Aurora;* treasurer, N. A. Anderson, *Linron;*

Trustees: Al Green; Norman Rustad, *Nordot;* W. L. Andrews, *Wendy A.;* Angvald Ask, *Scenic;* Ed Hofstad, *Unimak;* Hjalmer Savikko, *White Eagle;* Karl Engberg, *Mary Stuart.*

Walter B. Johnson is manager of Halibut Producers Cooperative.

190' U.S. Fisheries Research Craft Designed

L. C. Norgaard & Associates, San Francisco naval architects and marine engineers, are working on a preliminary design for a 190x33x12 foot oceanographic survey and fisheries research vessel for the U.S. Fish & Wildlife Service, Bureau of Fisheries, Hawaii area office.

The ship will be equipped with underwater sound and TV photographic facilities, as well as facilities for stern trawling, long line fishing, plankton trawling, live bait tuna fishing, and oceanographic surveys. She will have a crew of 30, and will be air conditioned for work in the tropics.

The craft will be powered with twin 800-hp. marine diesel engines, turning variable pitch propellers.

FOOD FISH MARKETING

Section of PACIFIC FISHERMAN —

News and Views of National Trade in Fish and Shellfish

May 1960

At the Tuna Salute—Half of the head table at the Southern California Food Processors Assn. and California Fish Canners Association luncheon sponsored by can manufacturing companies. From the left: Donald P. Loker, vice president, Star-Kist Foods, Inc., toastmaster; Milan D. Smith, president, National Canners Association; Carroll Marquard, Continental Can Co.; James R. Barry, president, California Fish Canners Association; and Max J. Gorby, California Marine Curing & Packing Co.

Southern California Receipts

	Albacore	Bluefin	Skipjack	Yellowfin	Bonito, etc.	Total
San Pedro	7,190	122	7,990	34,435	17	49,754
San Diego	2,110	..	3,705	3,484	.	9,299
Total 1960 through April 16	9,300	122	11,695	37,919	17	59,053
Total 1959	6,435	1,225	16,960	38,496	113	63,229
Total 1958	3,748	503	17,156	29,486	305	51,198

Salmon Sellers Working On The Pack Coming Up

● Primary market salmon sales people are working on next season's pack this month. Not that they are taking orders on it; but they definitely are seeking to plumb the future in the mythical, mystical C.B., hoping to find there the answers to Questions 1 and 2: How many? and How Much?

1. How many shall we pack?
2. How much will they bring?

So far as 1959 salmon is concerned, there seems little concern. Virtually all of it has been sold; and Japanese Pinks were still coming in through April as some importers found need for them.

● The prospect for 1960 is full of uncertainties, and at presstime a number of them were still being talked in Moscow, where the Soviets were at grips with the Japanese in a long-drawn negotiation which would determine two points:

The amount of Asian salmon which would be available for European sale in 1960; and the intensity of the Japanese operations of 1960 in the Area of Intermingling.

If the Soviets force the Japanese to withdraw from waters adjacent to Kamchatka, the inevitable result will be that the high seas fleets will shift far to the east, where they bear heavily upon Reds of Alaskan origin, and more lightly upon fish bound in their maturity toward Asian streams.

Japanese Tuna Price Firm at Second Sale

Only a month following its No. 2 sale of 1960, the Japan Canned Tuna Exporters Association at the end of March announced the sale of 100,000 cases of canned Albacore at $10.15 per case, and 200,000 cases of canned lightmeat at $6.80.

These prices were the same as quoted in the previous sale of 280,000 cases; but in Japan some revision was believed probable at the May meeting of the association's directors.

San Kenteen Expanding Mexican Shrimp Operations

Frozen shrimp and lobster caught and packed in Mexico under the "San Kanteen" brand and shipped to the United States by refrigerated trucks and boats will be introduced to American housewives next fall through food chains and independent grocery stores, according to George E. Fuller, president of San Kanteen Corporation, which now supplies frozen Mexican shellfish to the American institutions market from a plant at Culiacan, state of Sinaloa.

A $5,000,000 expansion program announced by Mr. Fuller will finance construction of two new San Kenteen freezing and packing plants, one at Salina Cruz in the Gulf of Tehuantepec, on the lower Mexican West Coast, the other at Los Mochis on the mainland side of the Gulf of California.

Total annual U.S. consumption of shrimp alone, Mr. Fuller said, is 365,000,000 pounds, or 1,000,000 pounds daily. Approximately 65,000,000 pounds now come from Mexican waters, and San Kenteen's expansion will add another 10,000,000 pounds.

San Kenteen recently raised its capitalization from $800,000 to $3,000,000, Mr. Fuller stated, and an additional $2,000,000 of new capital has been earmarked for operating expenses, including construction of a fourth plant at Escuinapa, near Rosario, Sinaloa, if market needs warrant. Product will be purchased under contract from "cooperatives" which hold fishing concessions from the Mex-

ican government. Approximately 3,000 native fishermen operate through these cooperatives. San Kenteen will finance repairs or purchase of gear and boats for many cooperative members, Mr. Fuller said, including new clippers costing up to $100,000 each. These advance loans will be repaid from fresh shellfish catches. Completion of new plants is scheduled for the opening of the new fishing season next October.

Salvador Shrimp Handled

Bentley-Markey, Inc., San Francisco, have been appointed northern California and Pacific Northwest sales agents for El Presidente line of frozen shrimp produced by Pesca, S. A., Puerto El Triunfo, El Salvador.

According to Bentley-Markey officials shrimp fishing is now being carried on 12 months of the year out of Puerto El Triunfo, the shrimp boat fleet has been increased and production stepped up. The plant has been enlarged also to take care of the bigger production. Frozen shrimp from Pesca, S.A., is now being picked up directly by reefer ships and brought to West Coast ports.

Seattle Market

Market prices currently quoted at presstime by Pacific Northwest brokers and cannery sales department, cases of 48 tins, unless otherwise specified, good quality, as reported by the U. S. Bureau of Commercial Fisheries, Market News Service.

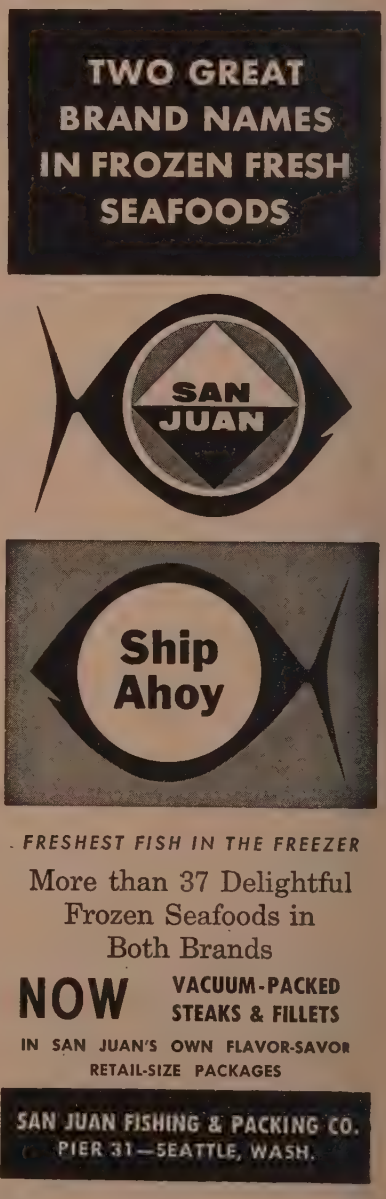
Items and Packages	Per Case
Puget Sound	
Sockeye, halves	$24 -25
Sockeye, quarters	14 -14.50
Alaska	
Red, talls	36 -38
Red, halves	23 -25
Pink, talls	24 -25
Pink, halves	13.50
Pink, 4-lbs. (12)	-25
Coho, talls	31
Coho, halves	18.50-19
Coho, quarters	-11.50
Chum, summer, tall	-22
Chum, summer, halves	12 -12.50
Chum, 4-lbs. (12)	-23
Chinook, talls	31 -32
Chinook, halves	24
Columbia River	
Blueback, halves	25 -26
Blueback, quarters	14 -14.50
Chinook, fancy, halves	25 -26
Chinook, fancy, quarters	-14.50
Chinook, choice, halves	17 -20
Chinook, choice, quarters	-11.75
Silver, halves	18.50-19
Silver, quarters	11.50-12.25
Tuna, Northwest Pack—	
Albacore, fcy., 7 oz.	12 -14
Yellowfin, s/pack, 7 oz.	11.00-
Yellowfin, chunk, 6½ oz.	9 -10
Tuna, Featured Pack—	
Albacore, fcy, 7 oz.	14.85-15.25
Albacore, fcy., 3½ oz.	9.10- 9.15
Albacore, chunk, 6½ oz.	10.50-13.50
Albacore, chunk, 3 oz.	6.50- 8
Lightmeat, fcy., 7 oz.	14.25
Lightmeat, fcy., 3½ oz.	8.55
Lightmeat, chunk, 6½ oz.	11.00
Canned Crab—	
Dungeness, 24, 6½ oz.	13.00-13.25
Dungeness, 24, 3¾ oz.	8.25
King, fcy., 7½ oz.	31-
King, std., 24, 7½ oz.	15.00-16
Alaska Shrimp—	
Tiny, 24, 4½ oz.	7.25- 7.50
Small, 24, 4½ oz.	8.50- 9.00
Medium	10.00

• Accompanying salmon prices are published quotations, "asking prices" and do not necessarily represent levels at which transactions have been consummated. They are subject to the usual brokerage commissions and discounts for cash and in lieu of allowance for normal swells; and frequently such figures are reduced by substantial advertising allowances. Complexity of variations in canned salmon quality, and the effect of changing levels of supply of the various items, make it probable that in most cases the amounts realized by the packer would be substantially below these figures, which are nevertheless quotations published by the U. S. Bureau of Commercial Fisheries' Market News Service.

Californians Judge Fish Products for Quality

San Francisco's first fishery products judging program was held last month under the sponsorship of the Northern California Seafood Institute, National Fisheries Institute Region IV Quality Committee, and the U. S. Bureau of Commercial Fisheries.

Chairman of the event was Rod T. Barnes, Standard Fisheries, Inc. Judging salmon steaks were: Albert Levy, Washington Fish & Oyster Co., of Calif., Lionel Shatz, A. Paladini, Inc., and John Mandas, Safeway Stores; rockfish fillets, Dick Wiggington,


TWO GREAT BRAND NAMES IN FROZEN FRESH SEAFOODS
SAN JUAN
Ship Ahoy
FRESHEST FISH IN THE FREEZER
More than 37 Delightful Frozen Seafoods in Both Brands
NOW VACUUM-PACKED STEAKS & FILLETS
IN SAN JUAN'S OWN FLAVOR-SAVOR RETAIL-SIZE PACKAGES
SAN JUAN FISHING & PACKING CO.
PIER 31—SEATTLE, WASH.

Charles P. Kearney & Co., James R. Townsend, James R. Townsend Co., Frank Allhands, U.S. Bureau of Commercial Fisheries, Ross Hatton, Bureau of Commercial Fisheries, and Vic Samson, Bureau of Commercial Fisheries; Dungeness crab, Budd Thomas, Eureka Fisheries, Inc., Babe Paladini, A. Paladini, Inc., and Robert Cole, Robert Cole Co.; sole fillets, Drs. Lionel Farber and Peter Lerke, Hooper Foundation, University of California, and Maurice Rafn, Bureau of Commercial Fisheries.

Out from Washington, D. C. was G. Clifford Byrd, associate director, technology division, NFI, to help with arrangements for the judging program.

Following the judging program was dinner and election of officers of the NCSI. Newly elected president is Budd Thomas, Eureka Fisheries, Inc.; vice-president, Charles Friscia, A. Friscia Seafoods, Inc., treasurer, Edward Puccini, A. Puccini & Sons, and re-elected, John Gilchrist, secretary-manager. Board of directors includes the officers, and Lionel Shatz, A. Paladini, Inc., chairman of the board; Sal Alioto, Tom Lazio Fish Co., Joseph C. Tarantino, Bell Smoked Fish Co., Wayne Henley, Wilbur-Ellis Co., Guido DiPiano, Central Fish Co., John Peterson, Washington Fish & Oyster Co. of Calif., and Lloyd Turnacliff, Meredith Fish Co., former president, who was elected an honorary board member.

BOOK REVIEW SECTION

The Best Thing on Salmon

● One of the best things ever published about canned salmon appeared this spring under the title:

"Take a Can of Salmon."

It's a beautiful recipe book, sponsored by the Canned Salmon Institute. and prepared and published by the U. S. Bureau of Commercial Fisheries.

Presumably the recipes are good ones, tested and selected and balanced for appeal to tastes, the eye, the purse and the papa.

But even if the recipes *weren't* any good, the booklet would sell a lot of salmon because it is so beautifully and temptingly illustrated that the housewife, and even the husband, simply couldn't resist buying and trying a product which can be made to look as good as it tastes, and can be as healthful and wholesome as the book's illustrations are beautiful.

Here is a new high in salmon recipe books, a new peak of appeal reached by beautiful pictures, fine printing, artistic arrangement and a sense of salesmanship as well as cookery.

The Canned Salmon Institute and the Bureau of Commercial Fisheries have produced the best book yet on the subject of salmon as a sea food.

Heagerty Forms Firm

Pat Heagerty, for a number of years with the Oakland, Calif., fish brokerage firm of Kearney & Heagerty, is no longer associated with Charlie Kearney, but has formed Patrick Heagerty & Associates, 137 Maxine Drive, Pleasant Hills, Calif.

Mr. Heagerty represents Carnation Seafare Corporation in northern California.

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FOR PRODUCERS OF FOOD PRODUCTS
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Vacuum and Film Protect Salmon Steaks 14 Months

● Frozen Silver salmon steaks, vacuum-packed with food grade nitrogen flush, and handled through normal lines of distribution, were graded good quality by competent examiners when purchased from a retail cabinet 14 months after packing.

The steaks had been subject to an entirely unstaged shelf-life test, and emerged without rancidity detectable by organoleptic examination.

Details of this remarkable demonstration of shelf life in impermeable film were made to the Pacific Fisheries Technologists by Russell Boshell, quality control technologist of the San Juan Fishing & Packing Co., Seattle, at the 11th annual P.F.T. meeting at Gearhart, Ore., in March.

● Mr. Boshell found the package, whose code told him it had been packed 14 months before, in examining the stock of San Juan products in a retail frozen foods cabinet. The package had been shifted accidentally out of the path of purchase in normal stock replacement in a bona fide shelf-life test in no wise "staged".

On the basis of such proofs of protection, San Juan Fishing & Packing Co. is preparing to expand its production of fish products vacuum-packed in impermeable film.

In response to questions from the keenly - interested technologists, Mr. Boshell said San Juan had been able to reduce vacuum-packed "leaker losses" to a bare minimum by well-adjusted equipment, operator care in feeding the Flex-Vac machines, a few minutes delay in further packaging of the sealed film envelopes, and competent, discerning inspectors who examine the packages as they are placed in the individual window cartons.

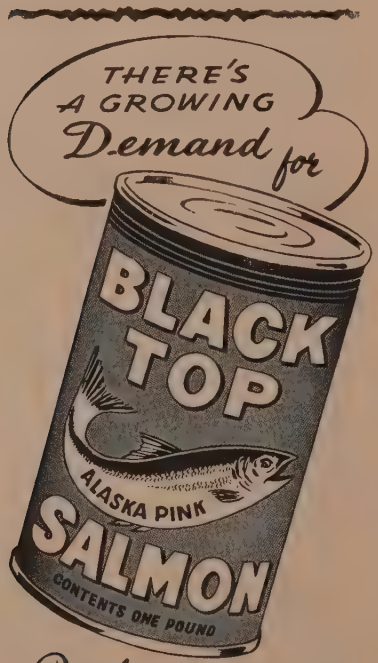
Controlled tests conducted by the San Juan quality control laboratory show that the triplex film used holds full vacuum for more than a year under normal conditions. (The company uses full vacuum on its products except salmon steaks, where nitrogen is introduced to cancel the tendency of the vacuum to draw free oil from the fish.)

Film packages currently in use in the San Juan operation are three-ply mylar - polyethylene - saran. Package cost runs from 2¢ to 3¢ per bag.

● In addition to his discussion of vacuum packing frozen fish products in film, Mr. Boshell showed the technologists a color-slide sequence of the varied packaging operations in the San Juan packaged frozen fish plant.

Sharing interest with the vacuum packing was the automatic machine weighing of exact-weight portion-controlled steaks.

(For further details on the San Juan operations in this field, reference is made to *Pacific Fisherman* for August, 1959, which contained an extended article on the subject.)



Quality
Pink Salmon
KELLEY-CLARKE CO.
2460 6th Ave. S.

"A Year for Re-Education of U.K. Trade in Frozen Salmon"—Sidwell

● "This is a year for re-education of the British market for Pacific frozen salmon and, to a lesser degree, frozen halibut.

"It has been so long since the United Kingdom could buy Pacific Silvers and Kings that the English people have largely forgotten them.

"Now they must be re-introduced and their value proven"—

It is Harold Sidwell talking as he passed among members of the Pacific frozen fish industry in Seattle and Vancouver at the first of April. He is head of Sidwell & Co., leading factors in the British import fish business in all its aspects; and in frozen fruits and vegetables as well.

He had flown out from London and returned after moving from the Pacific Coast to the Maritime Provinces.

● In canned salmon, Mr. Sidwell reports an easing of interest, with the flush of buying over, pipelines well filled, and the rate of consumption reflecting the elevated prices. Reds move in a steady, moderate manner, particularly the nationally known brands; but Pinks and Chums are weak. "The heyday is past," he summarizes.

Orderly marketing and consumer confidence have not been helped in Britain by such devices as labels featuring "RED COHOE".

Peruvian canned bonito, the leading factor in the British tuna trade, there is a re-awakening of interest, although the volume handled remains relatively small in contrast with salmon.

Use of Sockeye quarters has become quite well established and can be expected to continue, although the demand will be affected when lower prices are available, bringing halves closer into line with public buying power.

Mr. Sidwell has intimate familiarity with Canadian and American fish products and production, as he spent several years as a young man training in the Maritime Provinces, British Columbia and Puget Sound plants and sales offices.

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Skarich and Kidd Top Fish Divoteers' Tourney

Old Jupiter Pluvius fought a losing battle with a benevolent Old Sol as they watched the keen competition of 149 dauntless Fish Divoteers at this organization's twenty-second annual spring tournament at the Rainier Golf & Country Club in Seattle, April 22. Hospitality of the "Nineteenth Hole" and the banquet in the evening were enjoyed by 195 members and guests. The new president, C. E. "Bud" Moore, Fisheries Division, Branch of Market Development, U. S. Fish & Wildlife Service, presided.

The antics of Mike Storniola, Grace Line, Inc., who distributed the day's trophies and prizes as master of ceremonies, again stopped the show.

The perpetual trophy for low net in the first division went to George Skarich, Colorado Fuel & Iron Corporation, with low gross honors going to Clare Kidd, National Bank of Commerce. Gale Blasingame, Washington Fish & Oyster Co. and Don Cawley, Jr., Western Corrugated, Inc., took home permanent cups as last fall's low net and low gross winners.

In the second division the perpetual trophy was won by Bob Ennis, North Pacific Seafoods, with the award for low gross going to Walter Latham, American Can Company. Permanent cups for low net and low gross last fall were received by Ike Alhadeff, Whiz Fish Products Co. and Al Hansen, Vernon Scott Paper Co.

Hardy Parrish, Red Salmon Co., won the perpetual trophy for low net in the third division. Low gross went to H. R. Davis, Jas. Griffiths & Sons, Inc. Leif Ejde, Vita Food Products, Inc. and C. F. "Budge" Sargent, American Can Company, were awarded permanent cups for low net and low gross last fall.

Bob Ennis carded the best score in his golfing career to win the new Fish Divoteers trophy for low net in all three divisions.

Competing in the guest division, H. C. "Buzz" Hamlin, Fibreboard Paper Products Corporation, was the low net winner, with the low gross award going to Bob Moir, Tulloch-Western Fisheries, Vancouver, B. C.

The tournament was staged under the able direction of Harry Backman, Sayre & Toso, Inc., assisted by Barney McCallum, Griffin Envelope Co., George Skarich, Alf Larsen, Vendsyssel Packing Company, Inc., and Phil LeDuc, Fibreboard Paper Products Corporation. The same committee will be in charge of the fall tourney which will be played on the same course on September 9.

J. H. Todd Firm Buys North Shore's Fleet

J. H. Todd & Sons, Vancouver, B.C., has purchased the fleet of North Shore Packing Co., which will discontinue operations and retire from the fishing industry.

The purchase included three packers and two seiners—the *W. F. Gibson*, a 148' converted YMS; the *Norcrest*, a 96' converted SC; and the 114' *Nootka Chief*, a former AMC; the 85' *Norprince* and *Norcrown*. All these vessels had been purchased in the U.S.

One of the influences in the deal was the unfavorable situation in B.C.'s herring industry in which North Shore Packing Co. had been primarily interested, although it has done some salmon canning. Principal owners of the company were the Gibson brothers—Clark, Earson, Jack and Gordon, whose main interest has been logging on the west coast of Vancouver Island, although they were also associated with the revival of whaling in B.C. after World War II.

Dave Wilson, who had been manager of North Shore Packing Co., will probably continue to be associated with the Gibson brothers' other business operations.

R. L. Payne, general manager, J. H. Todd & Sons, negotiated the transaction with Mr. Wilson who acted on behalf of the Gibsons. Actually, it was the subsidiary Seymour Navigation Co. which operated the North Shore fleet, that changed hands. The shore properties of North Shore Packing Co. were not involved, including the plant at North Vancouver and a site near Ladner where it had been intended to build a cannery and reduction plant.

Mr. Payne says that no change is contemplated in the personnel and operation of the newly acquired vessels which will be integrated into the J. H. Todd fleet and eventually based at the Todd cannery in Steveston.

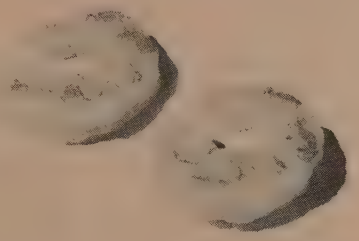
Plans for the Todd operations this year have not yet been finalized, but the Klemtu cannery will not be operated.

Continental Advances Martin to Seattle Plant Boss

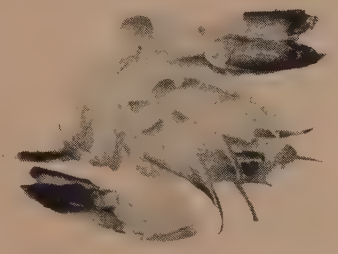
Paul K. Martin has been named manager of the Seattle, Washington metal can plant of Continental Can Company, it was announced by J. W. Broomhead, general manager of the company's North-Pacific district. Mr. Martin has been assistant manager of the firm's Portland, Oregon can plant for the past two years.

He replaces Iver J. Olsen, who is retiring after 42 years with the company.

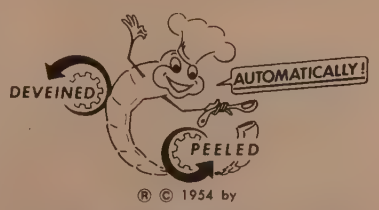
Isn't there more profit in selling shrimp...



than there is in selling shells?



The Peelers Co. specializes in automatic shrimp peelers, deveiners and graders.



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THE PEELERS CO.

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Write, wire or phone

California Trollers Well Prepared For Fishing

Ted and Dorothy Smith are now fishing the troller *Meteckla,* out of Evans Radio Dock, Oakland, Calif.

George Ankunding is now the skipper of the troller *Wiki Wiki. Kittiwake,* troller owned by B. E. Swanson, is being refrigerated at Evans Radio Dock.

Dan Hjort, Seattle, troller *Molly,* Ed Knudsen, troller *Reward,* Harold Graham, troller *Ann,* Port Angeles, C. F. McCormick, *Josephine,* Gig Harbor, Charlie Strickler, *Bonnie Jean,* Morro Bay, Jim Stillman, *Sea Doxie,* Long Beach, Charlie Graham, *Viv,* Moss Landing, and M. A. Mesenbrink, *Glendora,* Long Beach, were all at Evans Radio Dock last month getting their boats ready for the opening of the salmon season.

Ed Jarvis, formerly skipper of the troller *Venture II,* is now skipper of the *Howard K.*

Whidby Salmon Reserve Proposal Draws Fire

Legislative suggestion for closure to commercial fishing of all waters within a mile of the shore of Whidby Island in Puget Sound, Wash., triggered sharp opposition from commercial fishermen and packers before a Washington legislature interim fisheries subcommittee at Bellingham in April.

The idea for closure in the interests of sport fishing and resorts and boat houses serving sports fishing came from the South Whidby Chamber of Commerce, which is expected to ask the next legislature for enactment of legislation creating such a preserve.

Opponents of the idea contended it would greatly reduce the catch of Sockeye, Pink and Chum salmon, species of little interest to sportsmen.

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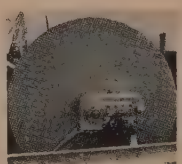
Marco Hydraulic "Hi-Liner" Gillnet Roller • Castings of salt water resistance aluminum • Rugged construction • Lever control for free wheeling or power operation. Proven performance in Bristol Bay.



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SEATTLE OFFICE — 1844 WESTLAKE NORTH

Bolstad's New Quarters Benefit Calif. Fishermen

Bolstad Sales & Service, San Pedro, last month celebrated seven years in business by moving into new and greatly enlarged headquarters at 401 Centre St., corner of Fourth, in the California city.

The new facility of more than 10,000 sq. ft., with available expansion space of equal area, comprises general offices, engineering department, service and assembly shop, spacious display floor and five times the warehouse space of the former location. A large, fenced private parking area adjoins the building.

Coincident with the move was the augmenting of the sales and service staff to become more aggressive in the industrial diesel field. Heretofore, the Bolstad organization has been primarily associated with parts, supplies and service for marine installations, with operations extending to the tip of South America and the Southwest Pacific.

Sam Bolstad reports that more than 500 suppliers, customers and local citizens attended the "house-warming," at which guided tours of the model store-warehouse layout were conducted by Sam himself.

● Success of Bolstad Sales & Service, marked by the move to the bigger building, is based on long experience in marine and industrial equipment, and thorough knowledge of the territory and its needs.

Before launching his own firm, Sam Bolstad was one of the principals in Diesel Control, a sales and service organization in Wilmington. He was port engineer for Atkinson & Pollock on the San Pedro breakwater construction job, and port engineer with Case Construction Co., San Pedro. He was also mechanical superintendent in Guam for Pollock-Stockton Shipbuilding Co. during the war years. Before coming to Los Angeles he was an engineer on tenders for Nakat Packing Corporation, salmon canners, in Southeast Alaska.

As the Southern California tuna business has expanded to the south, Bolstad Sales & Service has built up a growing export business. The firm now supplies customers in Mexico, Costa Rica, Panama, Peru and Chile, and acts as U. S. agent for some firms in those lands. In turn, several engineering firms in nations to the South represent Bolstad Sales & Service in their territories.

Among the lines represented by Bolstad are Acme piston rings, Engine-Life oil filters, Westinghouse air controls, Murphy diesel engines, Lister diesel engines (England), Bonney Forge & Tool Co. hand tools, Wix oil filters, Aeroquip hi-pressure hose and fittings, Goodyear rubber belt and hose, Rust-Oleum paint and rust preventative, Exide batteries and Ingersoll-Rand air starters.

Bolstad's New Home at Fourth and Centre, San Pedro, a California center for fishermen's engines and supplies.

Sam Bostad and suppliers' representatives join in celebrating the opening of the new plant: Left to right, North Jones, Murphy Diesel Co.; Tom Fitch, Aeroquip Corporation; Mr. Bolstad; Bill Bernsen, Engine-Life oil filters.

Southern California Domestic Tuna Deliveries

Cumulative totals for 1960 through April 16, in tons, as reported by U.S. Market News Service

	Albacore	Bluefin	Skipjack	Yellowfin	Bonito, etc.	Total
Chippers and Albacore Fleet		...	7,123	9,075	...	16,198
Purse Seiners		110	866	22,649	17	23,642
Total 1960 through April 16		110	7,989	31,724	17	39,840
Total 1959		1,225	14,570	24,328	113	40,236
Total 1958	4	421	16,022	20,142	305	36,894

California Imports of Frozen Tuna

Cumulative data in tons for 1960 through April 16, and for other years to the nearest comparable date. Data from U. S. Market News Service

	Albacore	Skipjack	Yellowfin	Unclassified	Total
San Francisco	453	14	2,679	74	3,220
San Pedro	7,190	2,282	7,353	12	16,837
San Diego	2,110	..	266	..	2,376
Total to April 16	9,753	2,296	10,298	86	22,433
1959	6,715	2,541	17,138	..	26,394
1958	4,856	1,152	11,100	82	17,190

U. S. Imports of Fish Meal

Country of Origin	1959	1958	1957	1956	1955	1950	1940
				(METRIC TONS)			
CANADA	39,063	27,777	42,823	57,127	41,661	42,499	25,131
PERU	49,923	33,371	16,817	8,756	8,734	3,917	.....
CHILE	5,104	8,160	1,108	.....	.....	377	.....
ANGOLA	20,738	18,062	9,708	5,063	12,138	6,503	.....
SOUTH AFRICA	9,727	7,345	4,015	3,470	3,545	.....	.....
NORWAY	141	1,184	2,930	10,965	14,568	2,903	68
OTHER	8,259	4,453	3,795	6,030	17,357	7,656	20,934[1]
TOTAL	132,955	100,352	81,196	91,411	98,003	63,855	46,133

[1] Japan, 18,162 tons.

Source: U.S. Bureau of Commercial Fisheries.

Forward-Looking 'Gilbert' Peeks at Fish Under Water

● Lengthened for a second time in her relatively short life, the U. S. Bureau of Commercial Fisheries research vessel *Charles H. Gilbert* is now back on duty for the Hawaiian Biological Laboratory, according to Vernon E. Brock, Hawaii Area Director of the U.S.B.C.F.

Beside being lengthened from 100 to 112′ in a major rebuilding job, the Gilbert was equipped with an underwater observation station in the bulbous bow, new main engine, new pilot house, a trawl winch, and equipment for handling large trawls over the side.

Design and engineering for the changes was the work of L. C. Noorgaard and Associates, San Francisco naval architects and engineers; while the remodelling was contracted to Gunderson Bros. Engineering Corporation, Portland.

The vessel's original cutaway bow was altered to bulbous, with an underwater observatory equipped with three 12x18" ports of tempered glass, one looking dead ahead, and one to either hand.

This observatory is about 7′ below the waterline and will accommodate an observer, either sitting or lying down, who can photograph the marine life at that depth.

The superstructure was also added to with the construction of a combination library-laboratory and new wheelhouse. Also accommodations for more scientists were added in three two-men rooms, and one four-man room in the hold amidships. All living spaces on the ship were air conditioned.

The after bait tank was made portable to provide more deck space for other types of fishing when live bait was not required. On the main deck, forward of the house, were installed trawl winch and gallows for otter trawling. Aluminum otter trawl boards are used.

The *Gilbert* is equipped for long-line tuna fishing, live bait tuna fishing, plankton trawling, otter trawling and hydrographic surveys.

Finally the ship was repowered with a Caterpillar D397 turbo charged marine diesel engine, 300 hp. with hydraulic starting and 3-1 Cat reverse and reduction gears. New Sperry electro-hydraulic steering gear with automatic compass pilot was installed. Engine controls are by Westinghouse Air Brake.

Albert Akana, marine superintendent in the Islands for the Bureau, supervised the job at Gunderson Bros.

First use was made of the bow chamber in observing porpoises riding the ship's bow wave. Their postures while riding the bow wave was a curious one, a rigid arc with both head and tail depressed. This was quite different from the posture previously accepted. In fact the observed posture seemed most inappropriate for its apparent function, that of utilizing a pressure wave at the ship's stem for a free ride.

work boat POWER!

Got a tough boating job? Here's the motor that takes it in stride—Evinrude's 1960 Big Twin! 40 horsepower at 4500 rpm. Big-load power that loves to work. It's as easy to pull over and start as most motors half its size—and thermostatic temperature control keeps it running at peak efficiency in any weather, on any water. Choice of props to fit boat and work. For constant, rugged duty, there's no finer outboard power—or more economical buy—than the stout-hearted Big Twin.

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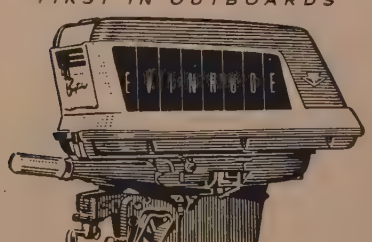


Trim Troll-and-Crab Boat for Gold Beach

Southern Oregon's fishing fleet welcomed a neat newcomer this spring in the *Donna N.*, a 32′ combination crab and trolling boat owned by Emil Nussbaumer of Gold Beach, Ore. The craft was launched at the Columbia Boat Building Co., Astoria, in April and christened by the young lady for whom it was named, Miss Donna Nussbaumer.

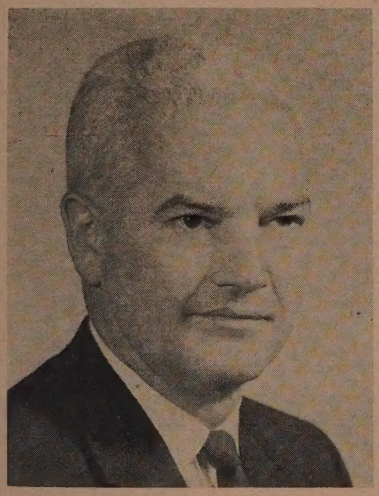
The craft will be fished out of Coos Bay this summer by John Belcher of Port Orford, Ore., and is scheduled to be honored as the first boat to enter the new boat basin building at Gold Beach at the mouth of the Rogue River.

Donna N. is powered with a 130-hp. Cummins diesel and is equipped with hydraulically operated crab pot winch and trolling gurdies.

Rozema Boat Works Rebuilds, Repowers "Alfrieda"

The 42′ purse seiner *Alfrieda*, owned by John D. Suryan of Anacortes, has undergone complete rebuilding by the Rozema Boat Works at Bay View, Wash. The work included installation of new water and fuel tanks, rebuilding of pilot house, repainting, and repowering.

LINES and LEADERS



William F. Humphrey, new Director of Sales, Marine and Industrial Engines, Chrysler Corporation, formerly Director of Sales, Hercules Motor Corporation, brings to his new position more than 20 years of experience in the sales and service of both gasoline and diesel engines for marine and industrial applications.

Vanina New Sales Manager For Sperry Piedmont Company

Rene A. Vanina has been appointed sales manager for Sperry Piedmont Co., a leading producer of ship navigation and control equipment.

As sales manager for Sperry Piedmont Co., Mr. Vanina will be responsible for both military and commercial sales. Sperry Piedmont Co. produces over 50 different products ranging from small commercial radio direction finders to complex ship motion control systems designed for Polaris submarines.

Mr. Vanina, 44 years old, joins the Company at a time when it is expanding towards becoming a leading national supplier of small boat radar and loran. These were new to boating until introduced by Sperry last year as part of a new line of marine electronic products.

Mr. Vanina joins Sperry from the Electro Dynamic Division of General Dynamics Corp. where his most recent position was that of divisional sales manager.

Atherton and Barnett Are Promoted by Tubbs

Tubbs Cordage Company, pioneer Pacific rope manufacturing concern, announces the advancement of Wallace I. Atherton to the position of general sales manager. Mr. Atherton is succeeded as Sales Manager by Stuart R. Barnett, formerly assistant sales manager.

Founded in 1856, Tubbs Cordage Company is one of the oldest companies in the West. The company manufactures a complete line of natural and synthetic fiber rope and twine for the marine, fishing, hardware, industrial and yachting trades.

Data on Onan Inverter Given in "Instapac" Bulletin

Of special interest to all users of microwave communications systems is a new "Product Information" bulletin on "Instapac" recently issued by D. W. Onan & Sons Inc., Minneapolis manufacturers of electric generating equipment. The folder describes how this Onan-developed transistorized 1 KVA inverter unit supplies almost instantaneous A.C. power to the load on interruption of commercial power. And, where not even a 20-millisecond lapse in power can be tolerated, this new folder tells how "Instapac" can be installed and operated as a continuous power supply.

Robert M. Purdy, newly-appointed sales manager of Chrysler Marine and Industrial Engine Division.

R. M. Purdy Sales Manager For Chrysler Marine Division

Robert M. Purdy has been named sales manager of Chrysler Marine and Industrial Engine Division, it is announced by William F. Humphrey, director of sales.

Mr. Purdy has an extensive background in the sales and customer contact field, having served the past ten years with Long Manufacturing and Detroit Gear Divisions, Borg-Warner Corporation, as service manager and assistant sales manager, and prior to that time held the same position with the Kent-Moore organization.

During World War II he was supervisor of customer contact with Detroit Transmission Division, General Motors Corp.

Shoreline Diesel Maintenance Co., Fishermen's Wharf, San Francisco, has installed a new hydraulic motor and pump testing machine. According to Rocky Yragui and Walt Lunardini, owners of Shoreline, more and more San Francisco fishing boats are using hydraulic motors, especially for powering gurdies on salmon boats.

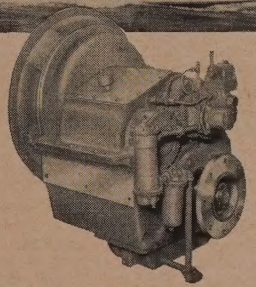
Shoreline has also expanded into the adjoining building, giving it more office and stockroom space.

PAUL W. HILLER
TE 4-4538
315 AVALON BLVD. WILMINGTON, CALIFORNIA
Manufacturer's Representative
CROWELL DESIGNS, INC.
SEN-DURE PRODUCTS, INC.
GRUNERT ELECTRIC REFRIGERATION
HILLER ALCOHOL STOVES

Only the best is cheapest in the long run.

A boat owner, builder acclaims S-N Gears.

"My first experience aboard Viking Maid with S-N gears was so satisfactory, S-N gears are standard equipment on Olympic Maid."



"In hard salmon fishing off the coast of Alaska and in Puget Sound our S-N gears have never faltered," says Dick Hansen, Seattle, Washington, Captain of *Olympic Maid.*

"I have been building boats and experience has taught that only the best equipment, like S-N gears, is the cheapest in the long run and shows a great profit at the season's end."

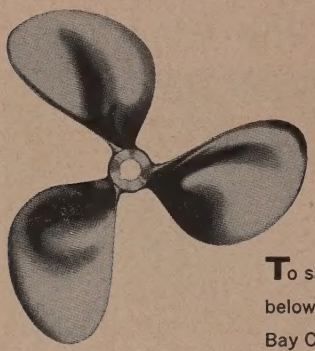
When you build or repower, specify efficient, economical S-N gears. See your distributor or write The Snow-Nabstedt Gear Corp., Hamden, Conn.

YOUR BEST BUY IN DEPENDABLE GEARS

SNOW-NABSTEDT

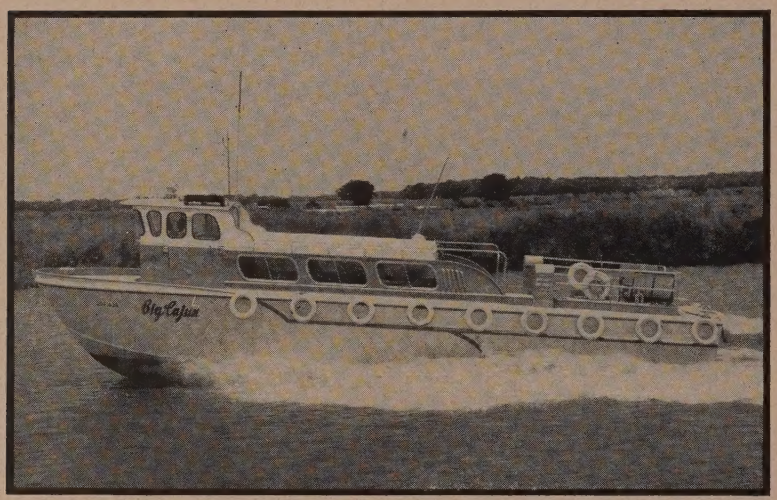
Transmission Engineers
FOR OVER HALF A CENTURY

For boats of every type... smart operators choose



MICHIGAN PROPELLERS!

To save costly crew time the 50' "BIG CAJUN" shown below had to be fast and the Louisiana builders, Breaux Bay Craft, Inc., wisely choose to equip these crew boats with MICHIGAN "DYNA-JET" propellers. At 2300 RPM they attain speeds upward of 32 miles per hour.



Whether you operate a fish boat, tug, or any other commercial or pleasure craft MICHIGAN can equip it with a wheel that will insure the very best performance of which it is capable. All MICHIGAN wheels are made of virgin metal alloys that spell longer service . . . more for your money. For an expert propeller recommendation, absolutely FREE, write to us for a copy of our Propeller Analysis form.

PRODUCTS OF THE WORLD'S LARGEST MANUFACTURER OF PROPELLERS IN SIZES THRU 72"—BACKED BY METALLURGISTS OF NATIONAL RENOWN AND CRAFTSMEN OF RECOGNIZED LEADERSHIP

REPAIRS . . . Each Michigan metal was formulated with repairs in mind. And propeller repair stations, with factory-trained technicians, are located everywhere in the U.S. Fast, low cost, precision repair service is always available to Michigan Wheel users.

041

michigan wheel company

GRAND RAPIDS 2, MICHIGAN

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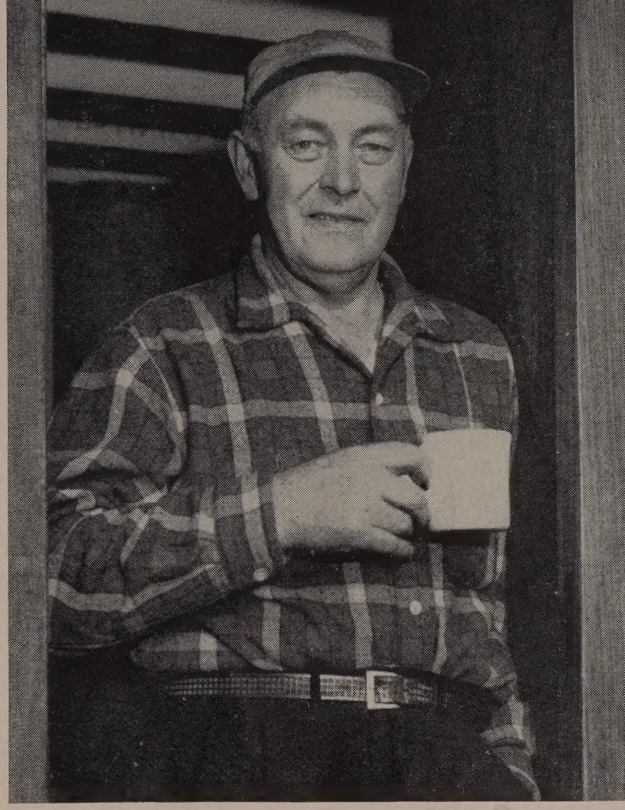
Captain Severin Tynes repowered the "Karen T" with a Cat D337. Here's what he says...



"We bought a Caterpillar Engine after shopping around and looking at all the engines available. It was noted that Caterpillar owners had 'more luck.' This impressed us, as did the fact that Caterpillar Engines have the power for which they're rated.

"We found that the fuel consumption figures given us were not exaggerated. In fact, we found that the engine burned less fuel than the dealer quoted.

"Our Caterpillar burns the same amount of fuel as the old engine but gives us one mile per hour more speed. This extra speed saves us a full day on a halibut trip of about three weeks. Extra speed lets us turn down unsatisfactory Ketchikan or Prince Rupert bids for our fish and make the market in Seattle in three days. Our increased speed lets us bring better quality fish to market by shortening the run home to market ports.

"Our speed means we can fish a part of a day longer during winter dragging. With good fishing conditions this can mean as much as $500 gross increase on a given trip.

"With the Cat Engine, when we tow, we get plenty of engine power at 1200 RPM. And we get away from the rattle of the old engine. In tuna fishing, where noise is harmful, we have found the Caterpillar Diesel quieter which means better fishing. Our Caterpillar Engine has helped us in all three types of fishing—drag, halibut and tuna.

"In our summer salmon packing charters, when the boat is working for the salmon canneries, we have found the 'Karen T's' speed is a very valuable asset. You stand a better chance of getting a charter with a fast boat. The canneries look for speed and dependability."

Anton A. Moe adds his comments as partner

"I haven't had to put a wrench on the engine for three years, except to change injection capsules and that was when water got in the fuel. With two pumps out of commission, the engine ran on four cylinders and turned 1500 RPM. This engine has an honest horsepower rating. This is no baloney. And the engine is easy to work on. An engineer appreciates such things."

Your Caterpillar Dealer has up-to-the-minute information for you on the newest in Caterpillar Marine Power. You won't be obligating yourself by talking to him. As a matter of fact, it might be one of the most profitable talks you've ever had, if your boat is powered with any engine other than a Caterpillar. May we suggest you get in touch with him soon.

MARINE POWER BY CATERPILLAR

CATERPILLAR

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